

**U.S. EPA Region V START
Allied Paper
DATA VALIDATION**

US EPA RECORDS CENTER REGION 5



560105

**SDG # E30G5
Case # 29294**

PCBs in soil by SW-846 Method 8082.

1.

Samples	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E30G5	AP-SL023-03	Soil	5/31/01	6/02/01	6/08/01
E30G6	AP-SL003-01	Soil	5/31/01	6/02/01	6/09/01
E30G6DL	AP-SL003-01	Soil	5/31/01	6/02/01	6/09/01
E30G7	AP-SL003-02	Soil	5/31/01	6/02/01	6/09/01
E30G7DL	AP-SL003-02	Soil	5/31/01	6/02/01	6/15/01
E30G8	AP-SL003-03	Soil	5/31/01	6/02/01	6/09/01
E30G9	AP-SL003-04	Soil	5/31/01	6/02/01	6/09/01
E30H0	AP-SL003-04DP	Soil	5/31/01	6/02/01	6/09/01
E30H1	AP-SL002-01	Soil	5/31/01	6/02/01	6/09/01
E30H1DL	AP-SL002-01	Soil	5/31/01	6/02/01	6/09/01
E30H2	AP-SL002-02	Soil	5/31/01	6/02/01	6/09/01
E30H2DL	AP-SL002-02	Soil	5/31/01	6/02/01	6/13/01
E30H3	AP-SL002-03	Soil	5/31/01	6/02/01	6/09/01
E30H3DL	AP-SL002-03	Soil	5/31/01	6/02/01	6/09/01
E30H4	AP-SL001-01	Soil	6/01/01	6/02/01	6/09/01
E30H4DL	AP-SL001-01	Soil	6/01/01	6/02/01	6/13/01
E30H5	AP-SL001-02	Soil	6/01/01	6/02/01	6/09/01
E30H5DL	AP-SL001-02	Soil	6/01/01	6/02/01	6/09/01
E30H6	AP-SL001-03	Soil	6/01/01	6/02/01	6/09/01
E30H6DL	AP-SL001-03	Soil	6/01/01	6/02/01	6/09/01
E30H7	AP-SL056-04	Soil	6/01/01	6/02/01	6/09/01
E30H8	AP-SL056-05	Soil	6/01/01	6/02/01	6/09/01
E30H9	AP-SL067-04A	Soil	6/01/01	6/02/01	6/09/01
E30J0	AP-SD018-01	Soil	6/01/01	6/02/01	6/10/01
E30J0DL	AP-SD018-01	Soil	6/01/01	6/02/01	6/12/01
E30J1	AP-SD018-02	Soil	6/01/01	6/02/01	6/10/01
E30J1DL	AP-SD018-02	Soil	6/01/01	6/02/01	6/12/01
E30J2	AP-SD018-03	Soil	6/01/01	6/02/01	6/10/01
E30J2DL	AP-SD018-03	Soil	6/01/01	6/02/01	6/12/01
E30J3	AP-SD018-03DP	Soil	6/01/01	6/02/01	6/10/01
E30J3DL	AP-SD018-03DP	Soil	6/01/01	6/02/01	6/12/01
E30J4	AP-SD022-01	Soil	6/01/01	6/02/01	6/10/01

2. Holding Times

All samples were analyzed within the required holding time. Samples E30F5, E30F6, E30F7, E30G3, E30G4, E30J5, E30J6, E30J7, E30J8 and E30J9 were listed on the chain of custody record, but the PCB results were not included with the data package results.

3. Method Blank

Two method blanks were associated with the investigative samples, PBLKSD (lab file ID 15060724) and PBLKSE (lab file ID 3_060961). Fifteen extraction and cleanup blanks were associated with these samples. All blanks were free of contamination.

4. Surrogates

The decachlorobiphenyl surrogate recoveries were outside the quality control limits on the secondary column for samples E30H4 (1253%), E30H5 (711%) and E30H6 (375%). Therefore, qualify all detected compounds for samples E30H4, E30H5 and E30H6 as estimated (J). The decachlorobiphenyl surrogate recoveries for samples E30H5DL (687%) and E30H4DL (3198%) were diluted out on the primary column. The decachlorobiphenyl surrogate recoveries for samples E30H5DL (1077%), E30H6DL (378%), E30H4DL (185%) and E30G7DL (274%) and E30J3DL (201%) were diluted out on the secondary column. No action was taken.

5. Laboratory Control Sample

The laboratory control sample results were acceptable.

6. Matrix Spike/Matrix Spike Duplicate

The matrix spike/matrix spike duplicate was performed on sample E30G6. The matrix spike percent recovery for Aroclor 1254 (208%) was outside the quality control limit. The matrix spike duplicate percent recovery for Aroclor 1254 (0%) was outside the quality control limit. Therefore, qualify the Aroclor 1254 result in sample E30G6 as unusable (R).

7. Initial Calibration Verification

The arochlor initial calibration associated with these samples was performed on 5/30/01. All % RSD values for all compounds were acceptable.

8. Continuing Calibration Verification

The continuing calibration verification sample for Arochlor 1260 analyzed on 6/08/01 at 1323 hours on column DB-XLB had an average % D greater than 15% for the 5 identifying peaks. No investigative samples were associated with this continuing calibration verification sample.

The continuing calibration verification sample for Arochlor 1016 analyzed on 6/13/01 at 1249 hours on column DB-17MS had on average %D greater than 15% for the 5 identifying peaks. Qualify all Arochlor results in sample E30H2DL as estimated (J/UJ).

The continuing calibration verification sample for Arochlor 1016 analyzed on 6/10/01 at 1132 hours on column DB-17 and DB-1701 had an average % D greater than 15% for the 5 identifying peaks. No investigative samples were associated with this continuing calibration verification sample.

**U.S. EPA Region V START
Allied Paper
DATA VALIDATION**

**SDG # E30G5
Case # 29294**

PCBs in soil by SW-846 Method 8082.

1.

Samples	Station Location	Matrix	Date Collected	Date Extracted	Date Analyzed
E30G5	AP-SL023-03	Soil	5/31/01	6/02/01	6/08/01
E30G6	AP-SL003-01	Soil	5/31/01	6/02/01	6/09/01
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E30G7	AP-SL003-02	Soil	5/31/01	6/02/01	6/09/01
E30G7DL	AP-SL003-02	Soil	5/31/01	6/02/01	6/15/01
E30G8	AP-SL003-03	Soil	5/31/01	6/02/01	6/09/01
E30G9	AP-SL003-04	Soil	5/31/01	6/02/01	6/09/01
E30H0	AP-SL003-04DP	Soil	5/31/01	6/02/01	6/09/01
E30H1	AP-SL002-01	Soil	5/31/01	6/02/01	6/09/01
E30H1DL	AP-SL002-01	Soil	5/31/01	6/02/01	6/09/01
E30H2	AP-SL002-02	Soil	5/31/01	6/02/01	6/09/01
E30H2DL	AP-SL002-02	Soil	5/31/01	6/02/01	6/13/01
E30H3	AP-SL002-03	Soil	5/31/01	6/02/01	6/09/01
E30H3DL	AP-SL002-03	Soil	5/31/01	6/02/01	6/09/01
E30H4	AP-SL001-01	Soil	6/01/01	6/02/01	6/09/01
E30H4DL	AP-SL001-01	Soil	6/01/01	6/02/01	6/13/01
E30H5	AP-SL001-02	Soil	6/01/01	6/02/01	6/09/01
E30H5DL	AP-SL001-02	Soil	6/01/01	6/02/01	6/09/01
E30H6	AP-SL001-03	Soil	6/01/01	6/02/01	6/09/01
E30H6DL	AP-SL001-03	Soil	6/01/01	6/02/01	6/09/01
E30H7	AP-SL056-04	Soil	6/01/01	6/02/01	6/09/01
E30H8	AP-SL056-05	Soil	6/01/01	6/02/01	6/09/01
E30H9	AP-SL067-04A	Soil	6/01/01	6/02/01	6/09/01
E30J0	AP-SD018-01	Soil	6/01/01	6/02/01	6/10/01
E30J0DL	AP-SD018-01	Soil	6/01/01	6/02/01	6/12/01
E30J1	AP-SD018-02	Soil	6/01/01	6/02/01	6/10/01
E30J1DL	AP-SD018-02	Soil	6/01/01	6/02/01	6/12/01
E30J2	AP-SD018-03	Soil	6/01/01	6/02/01	6/10/01
E30J2DL	AP-SD018-03	Soil	6/01/01	6/02/01	6/12/01
E30J3	AP-SD018-03DP	Soil	6/01/01	6/02/01	6/10/01
E30J3DL	AP-SD018-03DP	Soil	6/01/01	6/02/01	6/12/01
E30J4	AP-SD022-01	Soil	6/01/01	6/02/01	6/10/01

2. Holding Times

All samples were analyzed within the required holding time. Samples E30F5, E30F6, E30F7, E30G3, E30G4, E30J5, E30J6, E30J7, E30J8 and E30J9 were listed on the chain of custody record, but the PCB results were not included with the data package results.

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Two method blanks were associated with the investigative samples, PBLKSD (lab file ID 15060724) and PBLKSE (lab file ID 3_060961). Fifteen extraction and cleanup blanks were associated with these samples. All blanks were free of contamination.

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The laboratory control sample results were acceptable.

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The matrix spike/matrix spike duplicate was performed on sample E30G6. The matrix spike percent recovery for Aroclor 1254 (208%) was outside the quality control limit. The matrix spike duplicate percent recovery for Aroclor 1254 (0%) was outside the quality control limit. Therefore, qualify the Aroclor 1254 result in sample E30G6 as unusable (R).

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The arochlor initial calibration associated with these samples was performed on 5/30/01. All % RSD values for all compounds were acceptable.

8. Continuing Calibration Verification

The continuing calibration verification sample for Arochlor 1260 analyzed on 6/08/01 at 1323 hours on column DB-XLB had an average % D greater than 15% for the 5 identifying peaks. No investigative samples were associated with this continuing calibration verification sample.

The continuing calibration verification sample for Arochlor 1016 analyzed on 6/13/01 at 1249 hours on column DB-17MS had on average %D greater than 15% for the 5 identifying peaks. Qualify all Arochlor results in sample E30H2DL as estimated (J/UJ).

The continuing calibration verification sample for Arochlor 1016 analyzed on 6/10/01 at 1132 hours on column DB-17 and DB-1701 had an average % D greater than 15% for the 5 identifying peaks. No investigative samples were associated with this continuing calibration verification sample.

The continuing calibration verification sample for Arochlor 1260 analyzed on 6/10/01 at 1132 hours on column DB-17 and DB-1701 had an average %D greater than 15% for the 5 identifying peaks. No investigative samples were associated with this continuing calibration verification sample.

The continuing calibration verification sample for Arochlor 1260 analyzed on 6/10/01 at 1209 hours on column PEST had an average %D greater than 15% for the 5 identifying peaks. Run logs listing the samples associated with this continuing calibration verification sample were not provided with this data package.

The continuing calibration verification sample for Arochlor 1260 analyzed on 6/11/01 at 1142 hours on column PEST II had an average %D greater than 15% for the 5 identifying peaks. Run logs listing the samples associated with this continuing calibration verification sample were not provided with this data package.



Contract Laboratory Program

**Sample Delivery Group (SDG)
Cover Sheet**

SDG Number E30G5

SG
6/4/01

Laboratory Name Southwest Laboratory of Ok. Laboratory Code SWOK

Contract No. 68W99079 Case No. ELM04.2-29294

Analyses Price 910.40 SDG Turnaround 7

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E30G5	7) E30H1	13) E30H7	19) E30J3
2) E30G6	8) E30H2	14) E30H8	20) E30J4
3) E30G7	9) E30H3	15) E30H9	21)
4) E30G8	10) E30H4	16) E30J0	22)
5) E30G9	11) E30H5	17) E30J1	23)
6) E30H0	12) E30H6	18) E30J2	24) SG 6/4/01

First Sample in SDG

Last Sample in SDG

First Sample Receipt Date

Last Sample Receipt Date

Note: There are a maximum of 20 field samples (excluding PE samples) in an SDG. Attach TRs to this form in alphanumeric order (the order listed above on this form).

3

Signature Hans m Burg

Date 6-4-01

67-4A-MAZE

DATE: June 25, 2001

Roy F Weston, Inc
3 Hawthorne Parkway Drive
Vernon Hills, IL 60061

Attn: Tonya Balla

SITE NAME: ALLIED PAPER

CASE NO.	LAB	NO # OF SAMPLES	SDG	MATRIX
29294	SOUTHWEST	20	E30 ^G 5	SOIL

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by: _____ Date: _____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

Received by Data Management Coordinator, CRL for file.

Date: _____

Signature: _____

FROM: U.S. EPA
Region V
Central Regional Laboratory
536 S. Clark, 10th Floor
CHICAGO, IL 60605

Sent By: Eva M. Dixon, Sr. Data Specialist
ESAT

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME SOUTHWEST LABORATORY OF OKLAHOMA
 CITY/STATE BROKEN ARROW, OKLAHOMA
 CASE NO. 29294 SDG NO. E3065 SDG NOS. TO FOLLOW _____
 SAS NO. _____
 CONTRACT NO. b8w99079
 SOW NO. OLM04.2

All documents delivered in the Complete SDG File must be original documents where possible.

	FROM	TO	LAB	EPA	CHECK
1. <u>Inventory Sheet</u> (Form DC-2) (Do not Number)	<u>1</u>	<u>2</u>	<u>V</u>		
2. <u>SDG Case Narrative</u>	<u>3</u>	<u>6</u>			
3. <u>SDG Cover Sheet/Traffic Report</u>					
4. <u>Volatiles Data</u>					
a. QC Summary System Monitoring Compound Summary (Form II Matrix Spike/Matrix Spika Duplicate Summary (Form III VOA) Method Blank Summary (Form IV VOA) GC/MS Instrument Performance Check (Form V VOA) Internal Standard Area and RT Summary (Form VIII VOA)		<u>N/A</u>	<u>N/A</u>		
b. Sample Data TCL Results - (Form I VOA-1, VOA-2) Tentatively Identified Compounds (Form I VOA- Reconstructed total ion chromatograms (RIC) for each sample For each sample: Raw Spectra and background-subtracted mass spectra of target compounds identified Quantitation reports Mass Spectra of all reported TICs with three best library matches					
c. Standards Data (All Instruments) Initial Calibration Data (Form VI VOA-1, VOA-2) RICs and Quan Reports for all Standards Continuing Calibration Data (Form VII VOA-1, VOA-2) RICs and Quantitation Reports for all Standards					
d. Raw QC Data BFB Blank Data Martix Spike/Matrix Spike Duplicate Data			<u>V</u>	<u>V</u>	<u>V</u>

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. 29254 SDG NO. E3065 SDG NOS. TO FOLLOW _____
 SAS NO. _____

	PAGE NOS	CHECK		
	FROM	TO	LAB	EPA
5. Semivolatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	<u>1/1a</u>	<u>1/2</u>	<u>✓</u>	
MS/MSD Summary (Form III SV)				
Method Blank Summary (Form IV SV)				
GC/MS Instrument Performance Check (Form V SV)				
Internal Standard Area and RT Summary (Form VIII SV)				
b. Sample Data				
TCL Results - (Form I SV-1, SV-2)				
Tentatively Identified Compounds (Form I SV-				
Reconstructed total ion chromatograms (RIC) for				
each sample				
For each sample:				
Raw Spectra and background-subtracted mass				
spectra of target compounds				
Quantitation reports				
Mass Spectra of TICs with three best library				
matches				
GPC chromatograms (if GPC is required)				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI SV-1, SV-2)				
RICs and Quan Reports for all Standards				
Continuing Calibration Data (Form VII SV-1, SV-				
RICs and Quantitation Reports for all Standards				
d. Raw QC Data				
DFTPP				
Blank Data				
Matrix Spike/Matrix Spike Duplicate Data				
e. Raw GPC Data				
6. Pesticides Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	<u>7</u>	<u>8</u>		
MS/MSD Duplicate Summary (Form III PEST)	<u>9</u>	<u>11</u>	<u>✓</u>	
Method Blank Summary (Form IV PEST)	<u>12</u>	<u>14</u>	<u>✓</u>	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO.	<u>29294</u>	SDG NO.	<u>E3665</u>	SDG NOS. TO FOLLOW	_____
				SAS NO.	_____

	PAGE NOS	CHECK		
	FROM	TO	LAB	EPA
6. <u>Pesticides Data</u> (Cont.)				
b. Sample Data	<u>15</u>	<u>149</u>	<u>✓</u>	_____
TCL Results - Organic Analysis Data Sheet (Form I PEST)				
Chromatograms (Primary Column)				
Chromatograms from second GC column				
GC Integration report or data system printout				
Manual work sheets				
For pesticides/Aroclors by GC/MS, Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				
c. Standards Data	<u>150</u>	<u>513</u>	<u>✓</u>	_____
Initial Calibration of Single Component (Form VI PEST-1 and PEST-2)				
Initial Calibration of Multicomponent Analytes (Form VI PEST-3)				
Analyte Resolution Summary (Form VI PEST-4)				
Performance Evaluation Mixture (Form VI PEST-5)				
Individual Standard Mixture A (FORM VI PEST-6)				
Individual Standard Mixture B (FORM VI PEST-7)				
Calibration Verification Summary (Form VII PEST-1)				
Calibration Verification Summary (Form VII PEST-2)				
Analytical Sequence (Form VIII PEST)				
Florisil Cartridge Check (Form IX PEST-1)				
Pesticide GPC Calibration (Form IX PEST-2)				
Pesticide Identification Summary for Single Component Analytes (Form X PEST-1)				
Pesticide Identification Summary for Multicomponent Analytes (Form X PEST-2)				
Chromatograms and data system printouts A printout of retention times and corresponding peak areas or peak heights				
d. Raw QC Data	<u>514</u>	<u>595</u>	<u>✓</u>	_____
Blank Data	<u>596</u>	<u>6013</u>	<u>✓</u>	_____
Matrix Spke/Matrix Spike Duplicate Data				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO.	<u>291254</u>	SDG NO.	<u>E3085</u>	SDG NOS. TO FOLLOW	_____
				SAS NO.	_____

	PAGE NOS	CHECK			
		FROM	TO	LAB	EPA
6. <u>Pesticides Data</u> (Cont.)					
e. Raw GPC Data	<u>614</u>	<u>6412</u>		X	
f. Raw Florisil Data	<u>n/a</u>	<u>n/a</u>			
7. <u>Miscellaneous Data</u>					
(Original preparation and analysis forms or of preparation and analysis logbook pages Internal sample and sample extract transfer chain-of-custody records Screening records All instrument output, including strip charts from screening activities (describe or list)	<u>643</u> <u>666</u> <u>6761</u>	<u>665</u> <u>673</u> <u>684</u>			
8. <u>EPA Shipping/Receiving Documents</u>					
Airbills (No. of shipments <u>1</u>)	<u>687</u>	<u>687</u>			
Chain-of-Custody Records	<u>688</u>	<u>690</u>			
Sample Tags	<u>691</u>	<u>710</u>			
Sample Log-in Sheet (Lab & DC1)	<u>711</u>	<u>714</u>			
Miscellaneous Shipping/Receiving Records (describe or list)					
<u>Instructions Analytical Request</u>	<u>715</u> <u>n/a</u>	<u>719</u> <u>n/a</u>			
9. <u>Internal Lab Sample Transfer Records and Tracking Sheets</u> (describe or list)					
10. <u>Other Records</u> (describe or list)					
Telephone Communication Log					
11. <u>Comments:</u>					

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO.	<u>29294</u>	SDG NO.	<u>E.3065</u>	SDG NOS. TO FOLLOW	_____
SAS NO.	_____				

Completed by: Sandra Jockett Sandra Jockett Date Check 4/15/01
(CLP Lab) (Signature) (Printed Name/Title) (Date)
Verified by: Janelle M. Williams Janelle M. Williams Date 06/15/01
(CLP Lab) (Signature) (Printed Name/Title) (Date)
Audited by: _____ (Signature) _____ (Printed Name/Title) _____ (Date)
(EPA)

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A/ Broken Arrow, OK 74012
918-251-2858
SDG NARRATIVE
June 15, 2001

CONTRACT: 68W99079

CASE NO: 29294

SDG NO: E30G5

SAMPLES: E30G5, E30G6, E30G6DL, E30G6MS, E30EGMSD, E30G7, E30G7DL, E30G8, E30G9, E30H0, E30HI, E3G0H1DL, E30H2, E30H2DL, E30H3, E30H3DL, E30H4, E30H4DL, E30H5, E30H5DL, E30H6, E30H6DL, E30H7, E30H8, E30H9, E30J0, E30J0DL, E30J1, E30J1DL, E30J2, E30J2DL, E30J3, E30J3DL and E30J4.

FRACTION: Pesticide/PCB

Twenty soil samples were analyzed for PCBs, by modified EPA SOW OLM04.2 using Flex Clause Modification PCB-REG5.

Columns: The soil samples were analyzed on J&W (agilent technologies) dual analytical columns, DB17MS, length 30m, id 0.32 mm, film thickness 0.25 um) and DB-XLB, length 30m, id 0.32 mm, film thickness 0.25 um)) and DB1701, length 30m, id 0.32 mm, film thickness 0.25 um) and DB17, length 30m, id 0.32 mm, film thickness 0.25 um) These columns were specifically designed for pesticide/PCB separation as required by the EPA's SOW. All applicable manufacturer's instructions were followed for the analysis of pesticides/PCBs. Manufacturer provided information on the performance characteristics of the columns are kept on site.

HYDROGEN was used as the carrier gas for all samples analyzed on instrument signals HP_15A and HP_15B with columns DB-17MS & DB-XLB.

The following samples in this SDG labeled with a DL are considered billable since these samples had dilutions analyzed to get target compounds within instruments linear range: E30G6DL, E30G7DL, E3G0H1DL, E30H2DL, E30H3DL, E30H4DL, E30H5DL, E30H6DL, E30J0DL, E30J1DL, E30J2DL and E30J3DL.

The sample cooler arrived at 2.7 degrees Celsius.

The modification for these soils included the following cleanups: OLM04.2 GPC cleanup followed by SW846 method 3630 Silica Gel Cleanup which was then followed by SW846-method 3665 sulfuric acid cleanup prior to analyses. No florisil clean up was necessary as part of the modification.

Sample E30G7 was analyzed undiluted, 10X-dilution and 100X dilution. The surrogates were within QC limits on the undiluted analyses but slightly high on the 10X analyses, therefore the undiluted analyses and the 100X were submitted in the data package and the 10X was put in the misc. section of the data package.

Blanks: No target analytes were detected in the extraction blanks.

Surrogates: Samples E30H4, E30H5 and E30H6 had high DBC surrogate recovery on one column at 1253%, 711% and 375%, respectively. The other column had recovery within QC limits indicating matrix interference on one column and these samples were not re-extracted.

Laboratory Control Spikes: Arochlor 1254 was used for the laboratory control spike. The recoveries were within QC limits for laboratory control spike and laboratory control spike duplicate.

Matrix Spikes: Arochlor 1254 was used for the matrix spike and matrix spike duplicate. The matrix spike had recovery high at 208% and the matrix spike duplicate had 0% recovery. The RPD was within QC limits. Note: amount found in sample was ~ 6X the amount spiked.

Retention Times: All retention times were within QC limits.

Resolution Checks: Since only PCBs were being analyzed for no resolution checks for pesticides were necessary.

Breakdown Products: Since only PCBs were being analyzed for no pesticide breakdown products were checked.

Initial Calibrations: Initial calibrations were analyzed for Arochlor 1016, 1242, 1254 and 1260 and all percent RSDs were within QC limits of an average 20% RSD per arochlor (this is the average % RSD of all 5 peaks).

Calibration Verifications: Calibration verifications were analyzed for Arochlors 1016 and 1260. All percent differences were within QC limits of an average 15%D per arochlor (this is the average %D of all 5 peaks), with the following exceptions: Arochlor 1260 analyzed on 6/08/01 at 1323 hrs on column DB-XLB had an average %D of 15.9% for all 5 peaks. Arochlor 1016 analyzed on 06/13/01 at 1249 hrs on column DB-17MS had an average %D of 16.5% for all 5 peaks. Arochlor 1016 & 1260 analyzed on 06/10/01 at 1132 hrs on columns DB-17 & DB-1701 had an average %D ranging from 16.2 to 20.9% for all 5 peaks on each column for each arochlor. Arochlor 1260 analyzed on 6/10/01 at 1209 hrs on column PEST had an average %D of 16.9% for all 5 peaks. Arochlor 1260 analyzed on 6/11/01 at 1142 hrs on column PEST II had an average %D of 25.5% for all 5 peaks.

NOTE: Arochlor 1016 & 1260 analyzed on 06/10/01 at 2151 hrs on columns DB-17 & DB-1701 had a bad injection and no data was collected. Therefore the FORM 7F has NA for all recoveries.

All manual integrations in this data package for GC/EC have been performed for one of the following reasons:

- a. Data system missed a peak during processing.
- b. Data system improperly integrated a peak.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.


Harry M. Borg
Organic Program Manager

June 15, 2001

2



**'SEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record**

Case No:	29294
DAS No:	2001ZG07
SDG No:	E30G5 L

Date Shipped: 6/1/01
 Carrier Name: FedEx
 Airbill: 821876982023
 Shipped to: Southwest Labs of Oklahoma, Inc.
 1700 West Albany
 Suite C
 Broken Arrow OK 74012
 (918) 251-0545

Chain of Custody Record

Relinquished By (Date / Time)

1 Tonya Bulla 6/1/01 1800

2

3

4

Sampler Signature:

Received By

(Date / Time)

6-2-01 9:00

For Lab Use Only

Lab Contract No:

680990N9

Unit Price:

910.40

Transfer To:

Lab Contract No:

Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY	Sample Condition On Receipt
E30F5	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050238 (Ice Only) (1)	AP-SL004-01	S: 5/31/01 16:30			
E30F6	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050239 (Ice Only) (1)	AP-SL004-02	S: 5/31/01 16:30			
E30F7	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050240 (Ice Only) (1)	AP-SL004-03	S: 5/31/01 16:30			
E30G3	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050250 (Ice Only) (1)	AP-SL023-01	S: 5/31/01 15:43			
E30G4	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050252 (Ice Only) (1)	AP-SL023-02	S: 5/31/01 15:43			
E30G5	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050253 (Ice Only) (1)	AP-SL023-03	S: 5/31/01 15:43			
E30G6	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050255 (Ice Only) (1)	AP-SL003-01	S: 5/31/01 17:45			
E30G7	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050257 (Ice Only) (1)	AP-SL003-02	S: 5/31/01 17:45			
E30G8	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050259 (Ice Only) (1)	AP-SL003-03	S: 5/31/01 17:45			
E30G9	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050261 (Ice Only) (1)	AP-SL003-04	S: 5/31/01 17:45			

COPY	
ORIGINAL DOCUMENTS ARE INCLUDED IN	CSF 29294 SDG E30G5
Signature	R Dackett
Date	6/14/01

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E30G6	Additional Sampler Signature(s): <i>4. R. Mehl</i>	Cooler Temperature Upon Receipt: 3.7°C	Chain of Custody Seal Number: 80710, 80711
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact?	Shipment Iced?

TR Number: 5-201142833-060101-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	29294
DAS No:	2001ZG07
SDG No:	E3065 L

Date Shipped: 6/1/01
Carrier Name: FedEx
Airbill: 821876982023
Shipped to: Southwest Labs of Oklahoma, Inc.
1700 West Albany Suite C
Broken Arrow OK 74012
(918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
Fanya Bulla 6/1/01 1800			6-2-01 9:00
2			
3			
4			

For Lab Use Only

Lab Contract No: 68W99079
Unit Price: 910.40
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY	Sample Condition On Receipt
E30H0	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050263 (Ice Only) (1)	AP-SL003-04DP	S: 5/31/01 17:45			
E30H1	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050265 (Ice Only) (1)	AP-SL002-01	S: 5/31/01 18:36			
E30H2	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050267 (Ice Only) (1)	AP-SL002-02	S: 5/31/01 18:36			
E30H3	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050269 (Ice Only) (1)	AP-SL002-03	S: 5/31/01 18:36			
E30H4	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-50270 (Ice Only) (1)	AP-SL001-01	S: 6/1/01 9:15			
E30H5	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050272 (Ice Only) (1)	AP-SL001-02	S: 6/1/01 9:15			
E30H6	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050274 (Ice Only) (1)	AP-SL001-03	S: 6/1/01 9:15			
E30H7	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050275 (Ice Only) (1)	AP-SL056-04	S: 6/1/01 10:50			
E30H8	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050276 (Ice Only) (1)	AP-SL056-05	S: 6/1/01 10:50			
E30H9	Soil/Sediment/ Rick Mehl	L/G	PCBs (7)	5-050277 (Ice Only) (1)	AP-SL067-04A	S: 6/1/01			

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E30G6	Additional Sampler Signature(s): 	Cooler Temperature Upon Receipt: 27 °C	Chain of Custody Seal Number: 80710, 80711
Analysis Key: PCBs = PCBs CJ	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input type="checkbox"/>	Shipment Iced? <input type="checkbox"/>

TR Number: 5-201142833-060101-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY



**EPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record**

Case No:	29294
DAS No:	2001ZG07
SDG No:	E3065 L

Date Shipped: 6/1/01
 Carrier Name: FedEx
 Airbill: 821876982023
 Shipped to: Southwest Labs of Oklahoma, Inc.
 1700 West Albany Suite C
 Broken Arrow OK 74012
 (918) 251-0545

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Dmyra Balla 6/1/01 1800			6-2-01 9:00
2			
3			
4			

For Lab Use Only

Lab Contract No: 68W99079
 Unit Price: 910.40
 Transfer To:
 Lab Contract No:
 Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY	Sample Condition On Receipt
E30J0	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050278 (Ice Only) (1)	AP-SD018-01	S: 6/1/01 12:05			E3065
E30J1	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050280 (Ice Only) (1)	AP-SD018-02	S: 6/1/01 12:05			
E30J2	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050281 (Ice Only) (1)	AP-SD018-03	S: 6/1/01 12:05			
E30J3	Sediment/ Joe Ruiz	L/G	PCBs (7)	5-050282 (Ice Only) (1)	AP-SD018-03DP	S: 6/1/01 12:05			
E30J4	Sediment/ Rick Mehl	L/G	PCBs (7)	5-050283 (Ice Only) (1)	AP-SD022-01	S: 6/1/01 15:20			
E30J5	Sediment/ Rick Mehl	L/G	PCBs (7)	5-050286 (Ice Only) (1)	AP-SD022-02	S: 6/1/01 15:20			
E30J6	Sediment/ Rick Mehl	L/G	PCBs (7)	5-050289 (Ice Only) (1)	AP-SD022-03	S: 6/1/01 15:20			
E30J7	Sediment/ Rick Mehl	L/G	PCBs (7)	5-050291 (Ice Only) (1)	AP-SD022-03DP	S: 6/1/01 15:20			
E30J8	Sediment/ Rick Mehl	L/G	PCBs (7)	5-050292 (Ice Only) (1)	AP-SD022-04	S: 6/1/01 15:20			
E30J9	Sediment/ Rick Mehl	L/G	PCBs (7)	5-050294 (Ice Only) (1)	AP-SD022-05	S: 6/1/01 15:20			

* SOL Final Sample

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E30G6	Additional Sampler Signature(s): <i>J. R. Lopez</i>	Cooler Temperature Upon Receipt: 2-7°C TAB	Chain of Custody Seal Number: 80710, 80711
Analysis Key: PCBs = PCBs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact?	Shipment Iced?

TR Number: 5-201142833-060101-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA 20191-3436 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY

2F
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column(1): DB-17MS ID: 0.32(mm) GC Column(2): DB-XLB ID: 0.32(mm)

CLIENT SAMPLE NO.	TCX 1	TCX 2	DCB 1	DCB 2	TOT
	%REC #	%REC #	%REC #	%REC #	OUT
01 PBLKSD	85	76	84	76	0
02 ELCS1	72	66	73	67	0
03 ELCS2	76	70	86	82	0
04 E30G5	62	85	80	78	0
05 E30G6	97	95	122	133	0
06 E30G6MS	97	95	119	141	0
07 E30G6MSD	86	84	125	100	0
08 E30G7	118	115	152	166	0
09 E30G8	64	58	96	93	0
10 E30G9	68	67	112	108	0
11 E30H0	67	68	122	118	0
12 E30H1	86	87	141	145	0
13 E30H3	82	82	130	126	0
14 E30H4	84	95	145	1253*	1
15 E30H5	87	94	104	711*	1
16 E30H6	84	90	85	375*	1
17 E30H7	78	80	76	68	0
18 E30H8	74	80	74	65	0
19 E30H9	109	114	131	132	0
20 E30G6DL	135	114	119	125	0
21 E30H1DL	118	94	121	122	0
22 E30H2	109	81	127	153	0
23 E30H3DL	119	88	147	138	0
24 E30H5DL	175	168	687D	1077D	0
25 E30H6DL	130	122	104	378D	0
26 E30H4DL	156	203D	3198D	1133D	0
27 E30H2DL	121	122	163	185D	0
28 E30G7DL	175	162	254D	274D	0
29					
30					

QC LIMITS

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

(30-170)

Column to be used to flag recovery values

* Values outside of QC limits

D Sample was diluted

2F
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column(1): DB-17 ID: 0.32(mm) GC Column(2): DB-1701 ID: 0.32(mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	PBLKSE	59	61	80	80	0
02	ELCS3	55	58	86	80	0
03	ELCS4	67	70	101	93	0
04	E30J0	60	70	88	93	0
05	E30J1	54	67	82	84	0
06	E30J2	35	47	74	93	0
07	E30J3	49	65	125	92	0
08	E30J4	56	63	76	66	0
09	E30J0DL	62	63	93	92	0
10	E30J1DL	61	68	96	97	0
11	E30J2DL	56	58	108	153	0
12	E30J3DL	75	84	201D	144	0
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

(30-170)

Column to be used to flag recovery values

* Values outside of QC limits

D Sample was diluted

3H
SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA

Case No.: 29294 SDG No.: E30G5

LCS Sample NO.: ELCS1

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS %	QC. LIMITS
Aroclor-1254	133	90.9	68	29-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD %	%	QC LIMITS	RPD #	RPD	REC.
Aroclor-1254	133	112	84	21	50	29-135		

Column to be used to flag recovery values

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

Comments: _____

3H
SOIL AROCLOR LABORATORY CONTROL SPIKE/ DUPLICATE RECOVERY

Lab Name: SWL-TULSA

Case No.: 29294 SDG No.: E30G5

LCS Sample NO.: ELCS3

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS %	QC. REC #	LIMITS REC.
Aroclor-1254	133	90.0	68	29-135	

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD %	%	QC LIMITS RPD #	RPD	REC.
Aroclor-1254	133	107	80	17	50	29-135	

Column to be used to flag recovery values

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

Comments: _____

3F
SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix Spike - Client Sample NO.: E30G6

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS %	QC. LIMITS	REC #	REC.
Aroclor-1254	377	2100	2880	208*	29-135		

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD %	QC	LIMITS	RPD #	RPD	REC.
Aroclor-1254	376	1860	0 *	43	50	29-135		

Column to be used to flag recovery values

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 2 out of 2 outside limits

Comments: _____

4C
AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PBLKSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: BL0602SD Lab File ID: 15060724

Matrix: (soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 06/02/01

Date Analyzed (1): 06/08/01 Date Analyzed (2): 06/08/01

Time Analyzed (1): 1705 Time Analyzed (2): 1705

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS AND MSD:

CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01 ELCS1	LC0602SD	06/08/01	06/08/01
02 ELCS2	LD0602SD	06/08/01	06/08/01
03 E30G5	46676.06	06/08/01	06/08/01
04 E30G6	46676.07	06/09/01	06/09/01
05 E30G6MS	46676.08MS	06/09/01	06/09/01
06 E30G6MSD	46676.09MSD	06/09/01	06/09/01
07 E30G7	46676.10	06/09/01	06/09/01
08 E30G8	46676.11	06/09/01	06/09/01
09 E30G9	46676.12	06/09/01	06/09/01
10 E30H0	46676.13	06/09/01	06/09/01
11 E30H1	46676.14	06/09/01	06/09/01
12 E30H3	46676.16	06/09/01	06/09/01
13 E30H4	46676.17	06/09/01	06/09/01
14 E30H5	46676.18	06/09/01	06/09/01
15 E30H6	46676.19	06/09/01	06/09/01
16 E30H7	46676.20	06/09/01	06/09/01
17 E30H8	46676.21	06/09/01	06/09/01
18 E30H9	46676.22	06/09/01	06/09/01
19 E30G6DL	46676.07DL	06/09/01	06/09/01
20 E30H1DL	46676.14DL	06/09/01	06/09/01
21 E30H2	46676.15	06/09/01	06/09/01
22 E30H3DL	46676.16DL	06/09/01	06/09/01
23 E30H5DL	46676.18DL	06/09/01	06/09/01
24 E30H6DL	46676.19DL	06/09/01	06/09/01
25 E30H4DL	46676.17DL	06/13/01	06/13/01
26 E30H2DL	46676.15DL	06/13/01	06/13/01

Comments: _____

page 1 of 2

4C
AROCLOLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

PBLKSD

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: BL0602SD Lab File ID: 15060724

Matrix: (soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 06/02/01

Date Analyzed (1): 06/08/01 Date Analyzed (2): 06/08/01

Time Analyzed (1): 1705 Time Analyzed (2): 1705

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	E30G7DL	46676.10DL	06/15/01	06/15/01
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
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13				
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18				
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23				
24				
25				
26				

Comments: _____

4C
AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: BL0602SE Lab File ID: 3_060961

Matrix: (soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 06/02/01

Date Analyzed (1): 06/10/01 Date Analyzed (2): 06/10/01

Time Analyzed (1): 1311 Time Analyzed (2): 1311

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ELCS3	LC0602SE	06/10/01	06/10/01
02	ELCS4	LD0602SE	06/10/01	06/10/01
03	E30J0	46676.23	06/10/01	06/10/01
04	E30J1	46676.24	06/10/01	06/10/01
05	E30J2	46676.25	06/10/01	06/10/01
06	E30J3	46676.26	06/10/01	06/10/01
07	E30J4	46676.27	06/10/01	06/10/01
08	E30J0DL	46676.23DL	06/12/01	06/12/01
09	E30J1DL	46676.24DL	06/12/01	06/12/01
10	E30J2DL	46676.25DL	06/12/01	06/12/01
11	E30J3DL	46676.26DL	06/12/01	06/12/01
12				
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23				
24				
25				
26				

Comments: _____

page 1 of 1

14

HYDROGEN USED AS CARRIER GAS FOR SAMPLE ANALYSES

1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30G5

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.06

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 43 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/08/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
12674-11-2-----Aroclor-1016		.58	U
11104-28-2-----Aroclor-1221		58	U
11141-16-5-----Aroclor-1232		58	U
53469-21-9-----Aroclor-1242		58	U
12672-29-6-----Aroclor-1248		58	U
11097-69-1-----Aroclor-1254		58	U
11096-82-5-----Aroclor-1260		58	U
Surrogate amount spiked		11.66	

Hilary
FWatson
7/13/01

15A

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060741.D\ECD1A.CH Vial: 22
 Acq On : 08 Jun 2001 23:38 Operator: DDC
 Sample : 46676.06 *E30G5 * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*43 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060741.D\ECD2B.CH Vial: 22
 Acq On : 08 Jun 2001 23:38 Operator: DDC
 Sample : 46676.06 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S	TCX	7.59	7.35	257062	339526	7.247	9.912	#
	Spiked Amount	11.657		Recovery	=	62.17%	85.03%	
22)	S	DCB	18.28	18.68	323078	313920	9.385	9.036
	Spiked Amount	11.657		Recovery	=	80.51%	77.52%	

Target Compounds:

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
 (E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060741.D XPCBE30.M Sat Jun 09 12:31:27 2001

Page 1

Chromatographic Report

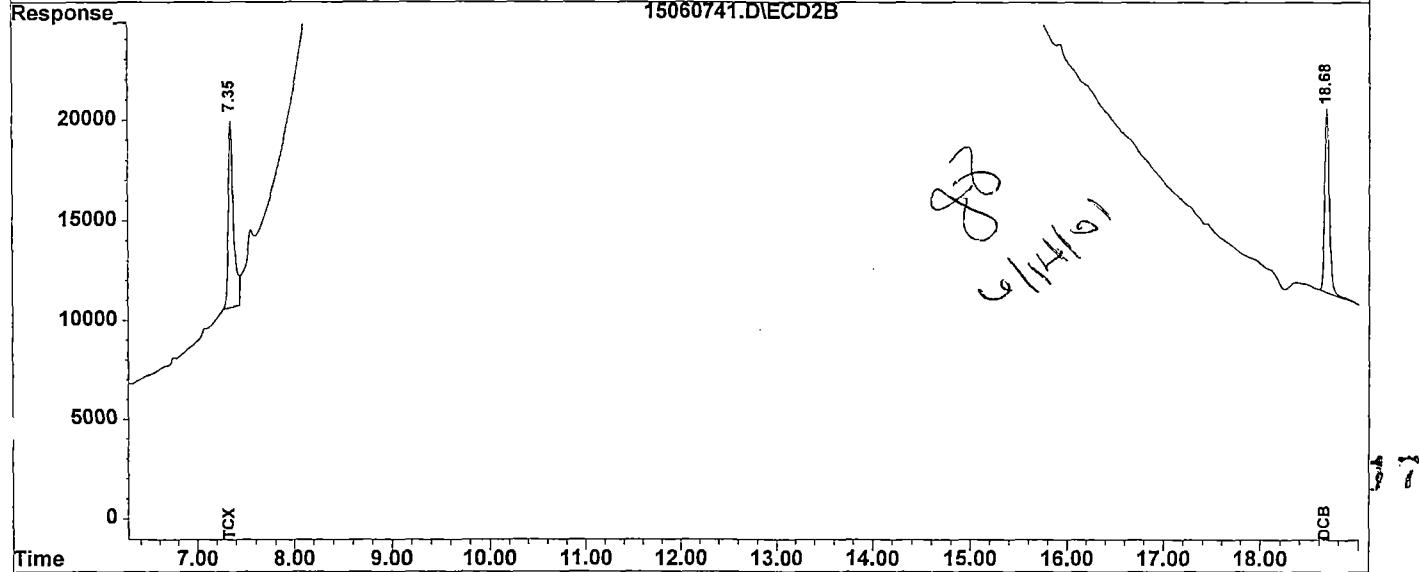
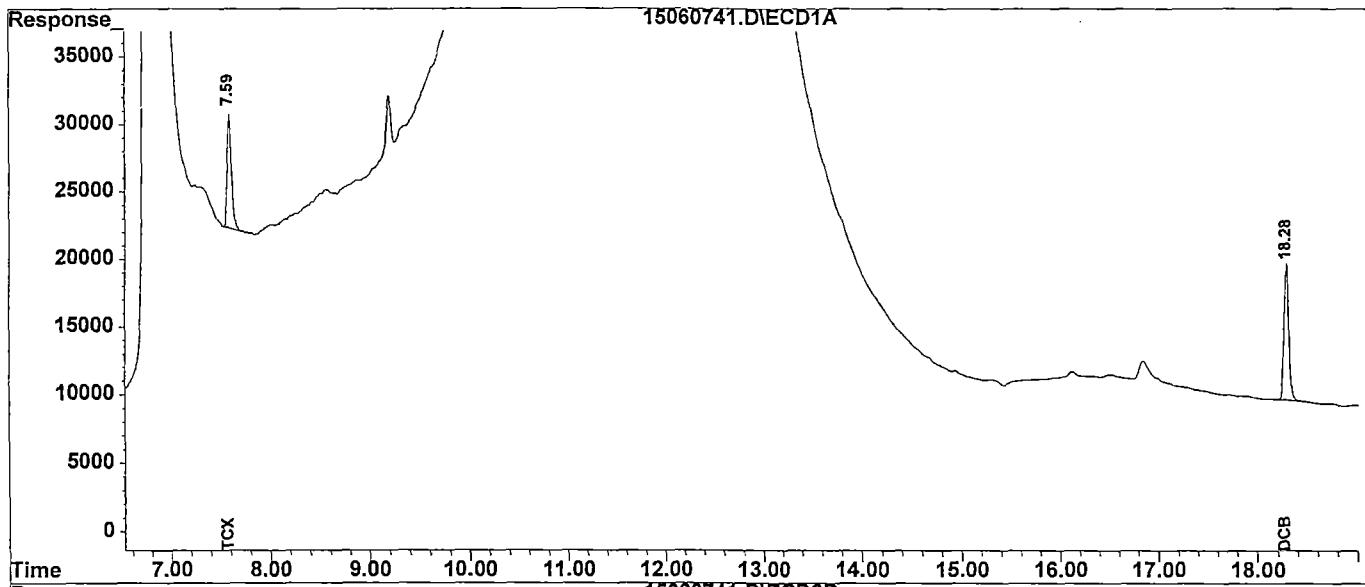
Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060741.D\ECD1A.CH Vial: 22
 Acq On : 08 Jun 2001 23:38 Operator: DDC
 Sample : 46676.06 *E30G5 * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*43 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060741.D\ECD2B.CH Vial: 22
 Acq On : 08 Jun 2001 23:38 Operator: DDC
 Sample : 46676.06 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_07_01\15060741.D\ECD1A.CH Vial: 22
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_07_01\15060741.D\ECD2B.CH
 Acq On : 08 Jun 2001 23:38 Operator: DDC
 Sample : 46676.06 *E30G5 * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*43 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 9 12:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S TCX	7.59	7.35	257062	339526	7.247	9.912	#
Spiked Amount	11.657		Recovery	=	62.17%	85.03%	
22) S DCB	18.28	18.68	323078	313920	9.385	9.036	
Spiked Amount	11.657		Recovery	=	80.51%	77.52%	

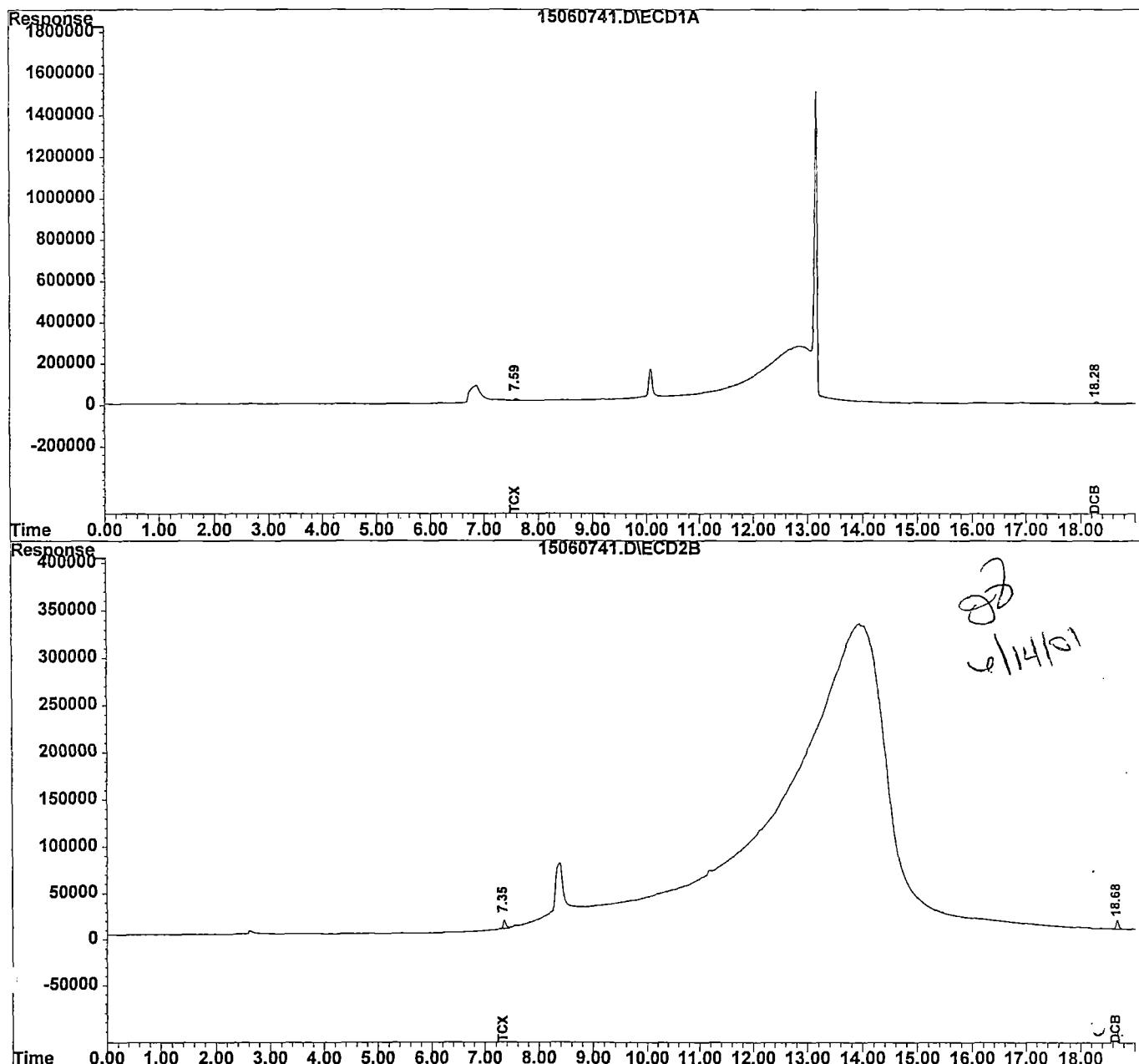
Target Compounds:

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_07_01\15060741.D\ECD1A.CH Vial: 22
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_07_01\15060741.D\ECD2B.CH
 Acq On : 08 Jun 2001 23:38 Operator: DDC
 Sample : 46676.06 *E30G5 * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*43 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 9 12:00 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30G6

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.07

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 65 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

12674-11-2-----Aroclor-1016	94	U	
11104-28-2-----Aroclor-1221	94	U	
11141-16-5-----Aroclor-1232	94	U	
53469-21-9-----Aroclor-1242	4700	E	5500 D
12672-29-6-----Aroclor-1248	94	U	
11097-69-1-----Aroclor-1254	2100	E	3700 D
11096-82-5-----Aroclor-1260	1100	E	1700 D
Surrogate amount spiked	18.92		

J (cont'd)
7/16/01TB
7/16/01

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060742.D\ECD1A.CH Vial: 23
 Acq On : 09 Jun 2001 00:01 Operator: DDC
 Sample : 46676.07 *E30G6 * Inst : HP_15
 Misc : *EPA*30.2G/5.0ML*65 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060742.D\ECD2B.CH Vial: 23
 Acq On : 09 Jun 2001 00:01 Operator: DDC
 Sample : 46676.07 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:02 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.59	7.35	401621	378651	18.4	17.9
	Spiked Amount	18.921			Recovery	=	97.24%
22)	S DCB	18.28	18.68	487775	537588	23.0	25.1
	Spiked Amount	18.921			Recovery	=	121.56%

Target Compounds:

9)	L4 Aroclor-1242 {3}	10.58f	12.39	2890183	1763526	3417.0 E	5223.7 E#
10)	L4 Aroclor-1242 {4}	11.64	12.62	2729913	1827580	4845.7 E	5408.3 E
11)	L4 Aroclor-1242 {5}	12.81	13.14	3987847	3164921	5846.7 E	6137.2 E
	Sum Aroclor-1242			9607943	6756027	14109.5	16769.3
	Average Aroclor-1242					4703.176	5589.752

12)	L6 Aroclor-1254	12.63	0.00	2185094	0	1958.3 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.32	0.00	1916972	0	3236.5 E	N.D. d #
14)	L6 Aroclor-1254 {3}	13.79	13.92	1947139	1225740	2038.5 E	2289.5 E
15)	L6 Aroclor-1254 {4}	14.31	14.92	1609530	1705479	2171.3 E	2267.0 E
16)	L6 Aroclor-1254 {5}	14.99	15.38	1311815	1842433	1762.9 E	1748.7 E
	Sum Aroclor-1254			8970549	4773652	11167.6	6305.3
	Average Aroclor-1254					2233.520	2101.753

17)	L7 Aroclor-1260	14.31	0.00	1609530	0	1219.0 E	N.D. d #
18)	L7 Aroclor-1260 {2}	14.81	14.72	2480311	2997006	1380.5 E	2384.4 E#
19)	L7 Aroclor-1260 {3}	15.25	14.92	2957541	1705479	1782.8 E	1184.6 #
20)	L7 Aroclor-1260 {4}	15.72	16.08	602432	394148	747.5	474.2 #
21)	L7 Aroclor-1260 {5}	16.16	16.32	1028590	1200294	605.1	608.0
	Sum Aroclor-1260			8678405	6296927	5425.6	4400.3
	Average Aroclor-1260					1146.974	1162.785

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
 (E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060742.D XPCBE30.M Sat Jun 09 12:03:11 2001

Page 1

Chromatographic Report

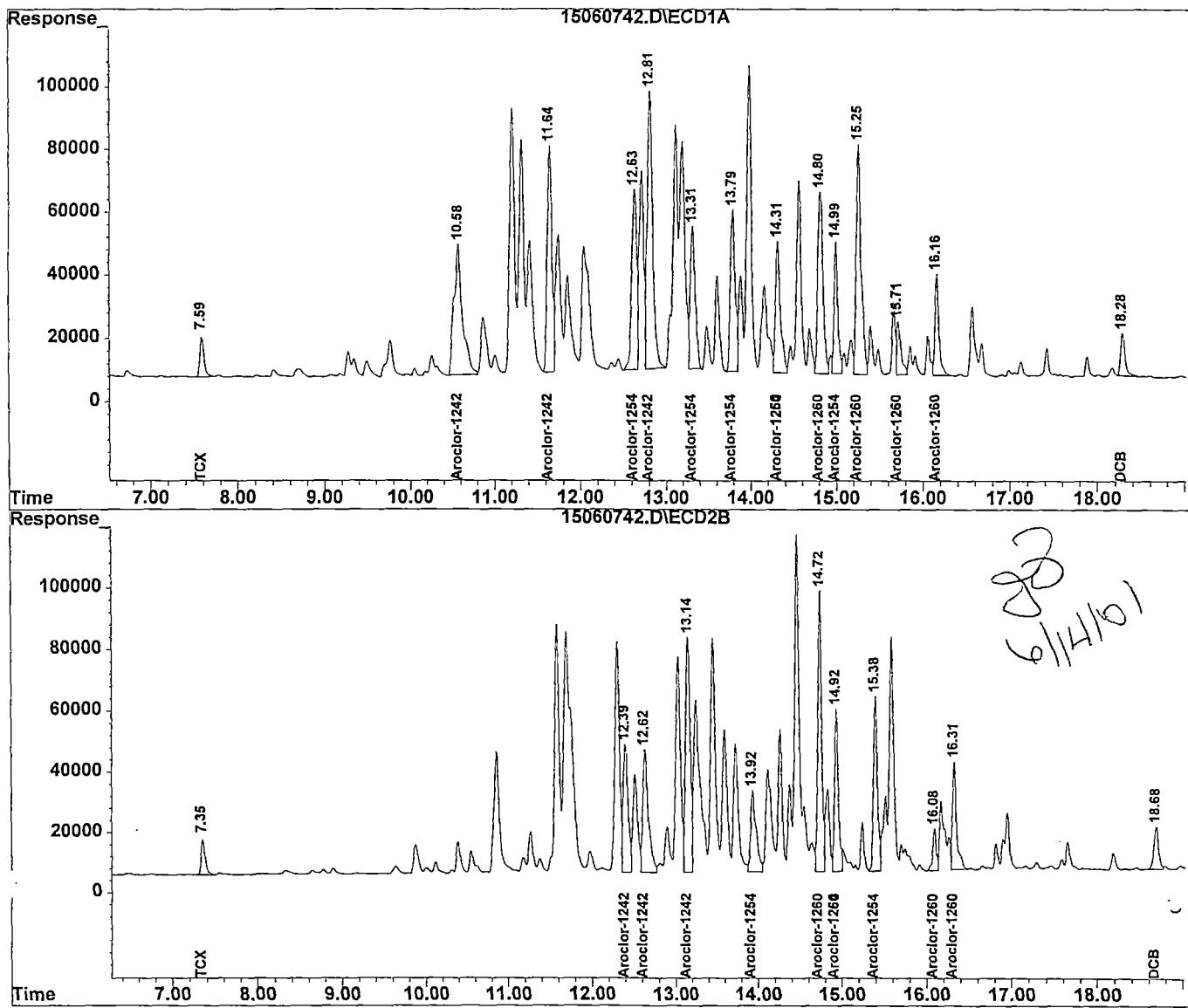
Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060742.D\ECD1A.CH Vial: 23
 Acq On : 09 Jun 2001 00:01 Operator: DDC
 Sample : 46676.07 *E30G6 * Inst : HP_15
 Misc : *EPA*30.2G/5.0ML*65 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060742.D\ECD2B.CH Vial: 23
 Acq On : 09 Jun 2001 00:01 Operator: DDC
 Sample : 46676.07 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

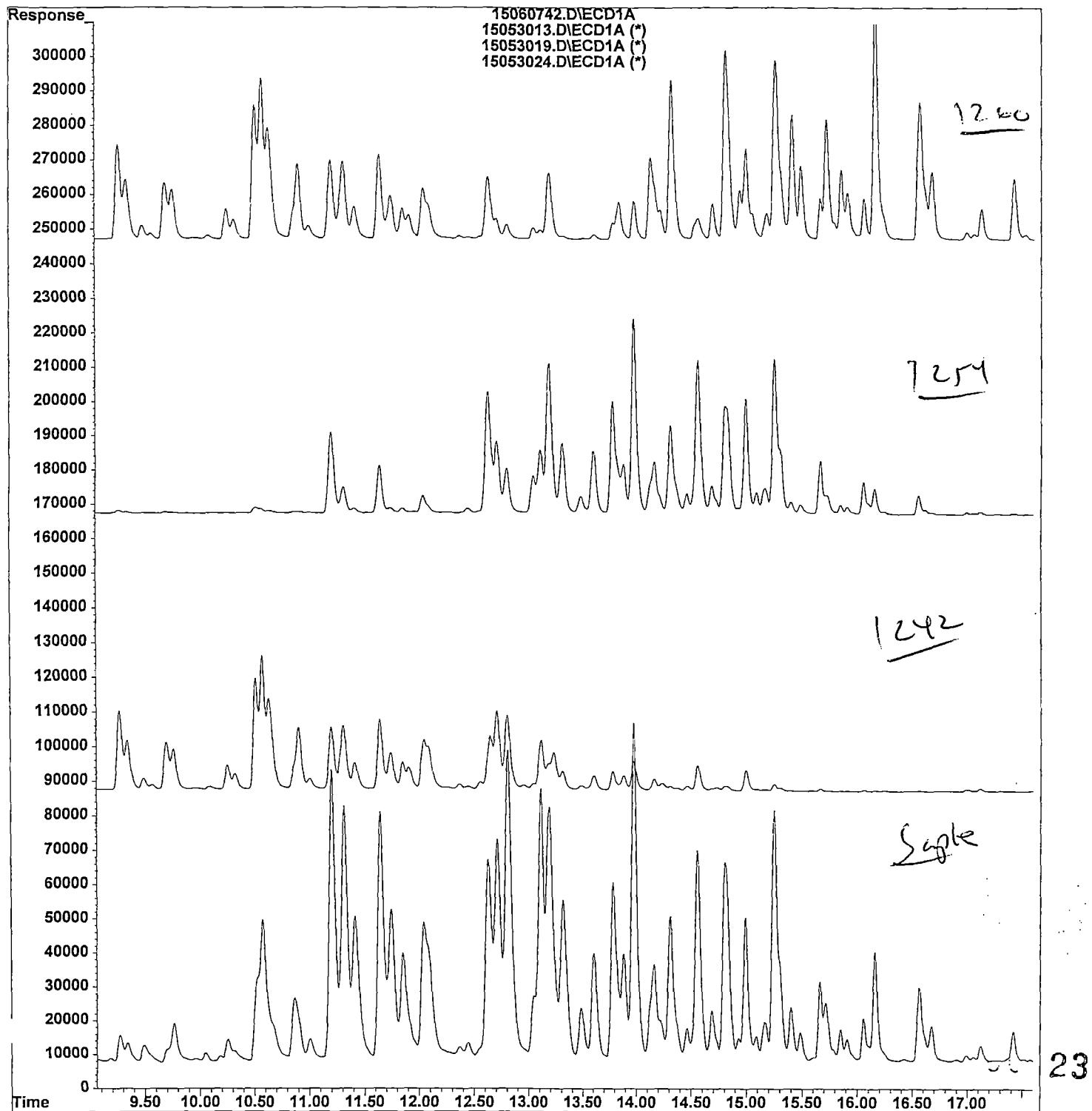
Quant Time: Jun 9 12:02 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



File : F:\HPCHEM\HP\15\DATA\06_07_01\15060742.D
Operator : DDC
Acquired : 09 Jun 2001 00:01 using AcqMethod OLM03.M
Instrument : HP 15
Sample Name: 46676.07
Misc Info :
Vial Number: 23



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30G6DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.07DL

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 65 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
12674-11-2-----	Aroclor-1016	940	U
11104-28-2-----	Aroclor-1221	940	U
11141-16-5-----	Aroclor-1232	940	U
53469-21-9-----	Aroclor-1242	5500	D
12672-29-6-----	Aroclor-1248	940	U
11097-69-1-----	Aroclor-1254	5700	D
11096-82-5-----	Aroclor-1260	1700	D
Surrogate amount spiked		18.92	

Hilary
Wataha
7/13/01

JL 24

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060902.D\ECD1A.CH Vial: 2
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060902.D\ECD2B.CH
 Acq On : 09 Jun 2001 16:35 Operator: DDC
 Sample : 46676.07DL *E30G6DL * Inst : HP_15
 Misc : *EPA*30.2G/5.0ML*65 Dilution: 10.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 10 10:10 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.59	7.35	55774	45671	25.5	21.6
	Spiked Amount	18.921		Recovery	=	134.77%	114.16%
22)	S DCB	18.28	18.68	47638	50570	22.5	23.6
	Spiked Amount	18.921		Recovery	=	118.91%	124.73%

Target Compounds:

7)	L4 Aroclor-1242	0.00	10.39	0	51672	N.D. d	1966.9	#
8)	L4 Aroclor-1242 {2}	9.76f	0.00	94844	0	2531.4	N.D. d	#
9)	L4 Aroclor-1242 {3}	10.57f	12.39	494654	265703	5848.3	7870.4	#
10)	L4 Aroclor-1242 {4}	11.65	0.00	463160	0	8221.3	N.D. d	#
11)	L4 Aroclor-1242 {5}	0.00	13.15	0	376566	N.D. d	7302.1	#
	Sum Aroclor-1242			1052658	693942	16601.0	17139.4	
	Average Aroclor-1242					5533.674	5713.122	
12)	L6 Aroclor-1254	12.63	0.00	379894	0	3404.7	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.32	13.02	314634	413650	5312.1	7422.4	#
14)	L6 Aroclor-1254 {3}	13.79	13.93	294784	203848	3086.2	3807.6	
15)	L6 Aroclor-1254 {4}	14.32	14.92	305291	270092	4118.5	3590.2	
16)	L6 Aroclor-1254 {5}	15.00	15.39	187092	262810	2514.3	2494.4	
	Sum Aroclor-1254			1481695	1150400	18435.8	17314.7	
	Average Aroclor-1254					3687.156	4328.671	
17)	L7 Aroclor-1260	14.32	0.00	305291	0	2312.1	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.81	14.72	425289	449647	2367.0	3577.4	#
19)	L7 Aroclor-1260 {3}	15.25	14.92	442069	270092	2664.8	1876.0	#
20)	L7 Aroclor-1260 {4}	15.72	16.09	97137	62514	1205.3	752.0	#
21)	L7 Aroclor-1260 {5}	16.16	16.32	135256	151642	795.7	768.1	
	Sum Aroclor-1260			1405041	933895	88410.0	65974.7	
	Average Aroclor-1260					1868.987	1743.383	

25

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060902.D XPCBE30.M Sun Jun 10 10:26:24 2001

Page 1

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060902.D\ECD1A.CH Vial: 2
Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060902.D\ECD2B.CH
Acq On : 09 Jun 2001 16:35 Operator: DDC
Sample : 46676.07DL *E30G6DL * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*65 Dilution: 10.00

IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 10 10:10 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL

Signal #1 Phase : DB-17MS

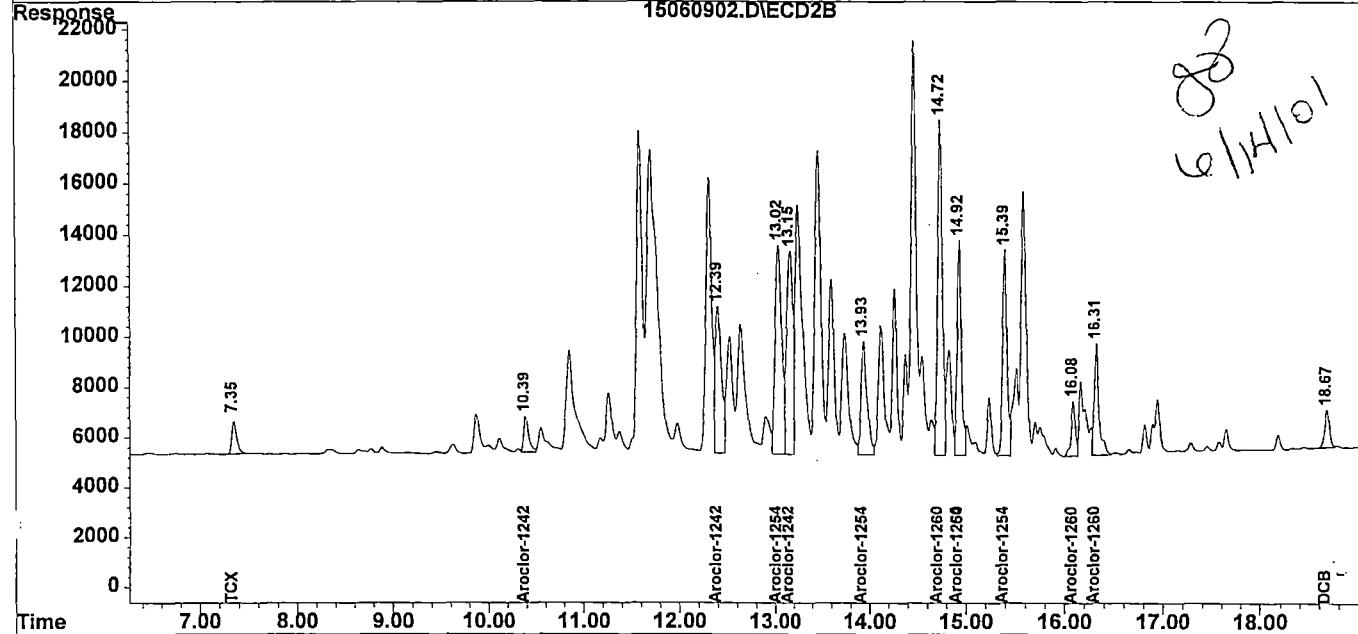
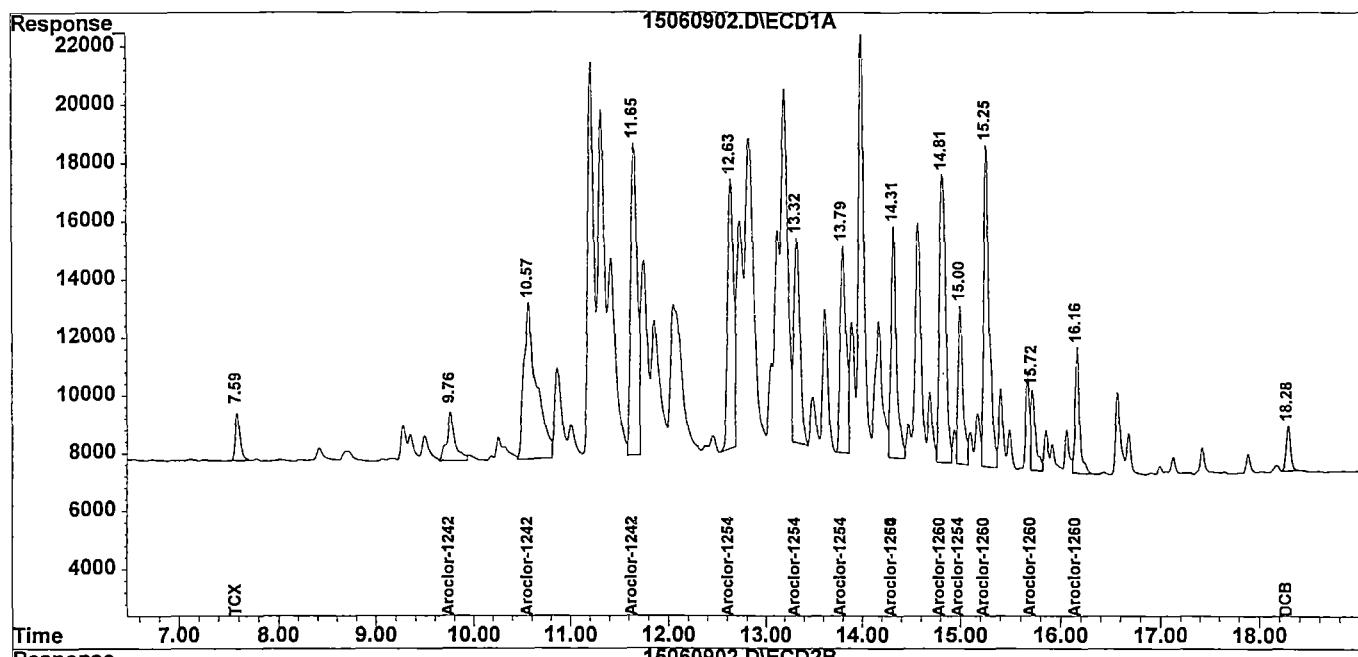
Signal #1 Info : .32 mm

Signal #1 Inst : HP 15A

Signal #2 Phase: DB-XLB

Signal #2 Info : .32 mm

Signal #2 Inst : HP 15B



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30G7

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.10

Sample wt/vol: 30.6 (g/mL) G Lab File ID: _____

% Moisture: 61 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		
		(ug/L or ug/Kg)	UG/KG	Q
12674-11-2-----	Aroclor-1016	83	U	
11104-28-2-----	Aroclor-1221	83	U	
11141-16-5-----	Aroclor-1232	83	U	
53469-21-9-----	Aroclor-1242	6100	E	9900 D
12672-29-6-----	Aroclor-1248	83	U	
11097-69-1-----	Aroclor-1254	2500	E	5100 D
11096-82-5-----	Aroclor-1260	1300	E	2200 D
Surrogate amount spiked		16.76		

Hilary
Walter
7/13/01

JC 27

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060751.D\ECD1A.CH Vial: 32
 Acq On : 09 Jun 2001 3:29 Operator: DDC
 Sample : 46676.10 *E30G7 * Inst : HP_15
 Misc : *EPA*30.6G/5.0ML*61 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060751.D\ECD2B.CH Vial: 32
 Acq On : 09 Jun 2001 3:29 Operator: DDC
 Sample : 46676.10 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:07 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.59	7.35	487557	458542	19.8	19.2
	Spiked Amount	16.759		Recovery	=	118.15%	114.57%
22)	S DCB	18.29	18.68	609062	674002	25.4	27.9
	Spiked Amount	16.759		Recovery	=	151.56%	166.48%

Target Compounds:

9)	L4 Aroclor-1242 {3}	10.58f	12.39	4383999	2947427	4590.8 E	7732.7 E#
10)	L4 Aroclor-1242 {4}	11.64	12.62	4418732	3070790	6947.0 E	8048.7 E
11)	L4 Aroclor-1242 {5}	12.80	13.13	5201683	4688517	6754.7 E	8052.5 E
	Sum Aroclor-1242			14004414	10706734	18292.5	23833.9
	Average Aroclor-1242					6097.503	7944.637

12)	L6 Aroclor-1254	12.63	0.00	2891910	0	2295.6 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.31	0.00	2387482	0	3570.2 E	N.D. d #
14)	L6 Aroclor-1254 {3}	13.79	13.92	2540948	2273062	2356.2 E	3760.5 E#
15)	L6 Aroclor-1254 {4}	14.31	14.92	1923739	2213305	2298.6 E	2605.8 E
16)	L6 Aroclor-1254 {5}	14.99	15.38	1620577	2419179	1928.9 E	2033.7 E
	Sum Aroclor-1254			11364656	6905547	12449.4	8400.0
	Average Aroclor-1254					2489.884	2799.998

17)	L7 Aroclor-1260	14.31	0.00	1923739	0	1290.4 E	N.D. d #
18)	L7 Aroclor-1260 {2}	14.81	14.72	3147384	3924257	1551.5 E	2765.3 E#
19)	L7 Aroclor-1260 {3}	15.25	14.92	3720181	2213305	1986.2 E	1361.6 E#
20)	L7 Aroclor-1260 {4}	15.72	16.08	766248	513660	842.1	547.3 #
21)	L7 Aroclor-1260 {5}	16.16	16.32	1438384	1579206	749.5	708.5
	Sum Aroclor-1260			10995936	8230429	5379.4	4510.4
	Average Aroclor-1260					1283.947	1345.670

Chromatographic Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060751.D\ECD1A.CH Vial: 32
 Acq On : 09 Jun 2001 3:29 Operator: DDC
 Sample : 46676.10 *E30G7 * Inst : HP_15
 Misc : *EPA*30.6G/5.0ML*61 Dilution: 1.00
 IntFile : events.e

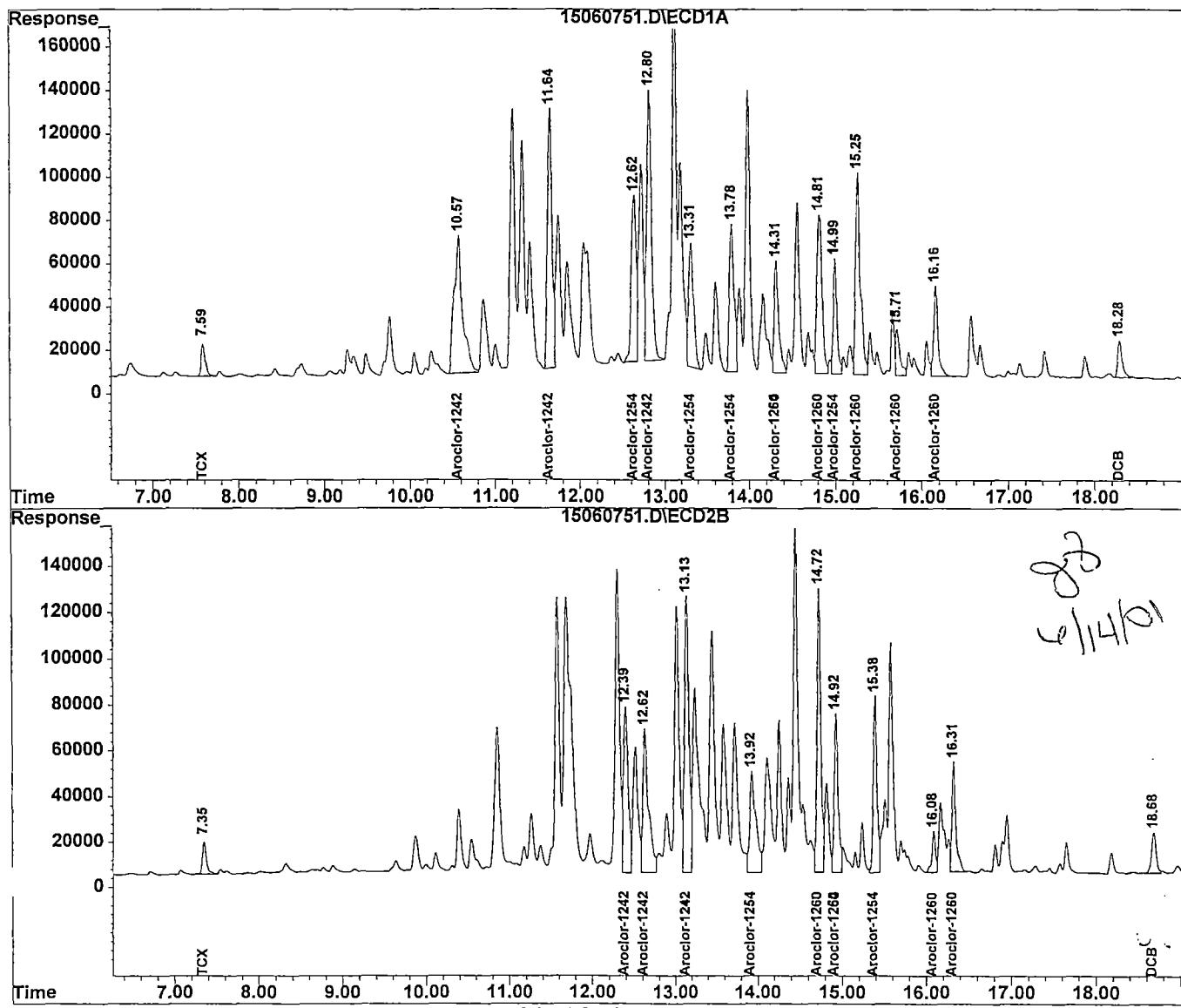
Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060751.D\ECD2B.CH Vial: 32
 Acq On : 09 Jun 2001 3:29 Operator: DDC
 Sample : 46676.10 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:07 2001 Quant Results File: XPCBE30.RES

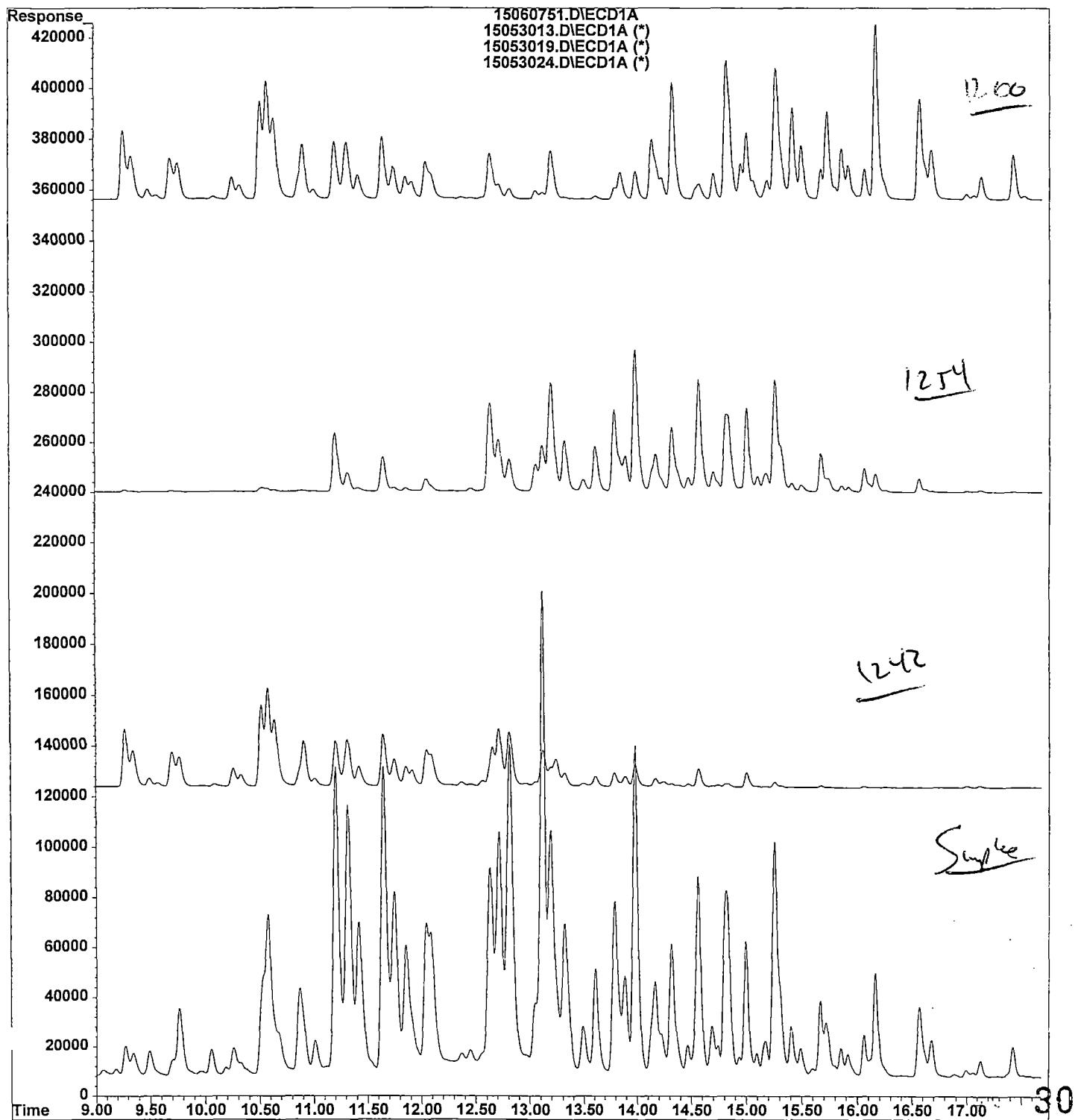
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 Title-Path : PCB/TOXAPENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS
 Signal #1 Info : .32 mm
 Signal #1 Inst : HP_15A

Signal #2 Phase: DB-XLB
 Signal #2 Info : .32 mm
 Signal #2 Inst : HP_15B



File : F:\HPCHEM\HP\15\DATA\06_07_01\15060751.D
Operator : DDC
Acquired : 09 Jun 2001 3:29 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46676.10
Misc Info :
Vial Number: 32



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30G7DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.10DL

Sample wt/vol: 30.6 (g/mL) G Lab File ID: _____

% Moisture: 61 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/15/01

Injection Volume: 0.5 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q		
12674-11-2-----Aroclor-1016		1600	U	
11104-28-2-----Aroclor-1221		1600	U	
11141-16-5-----Aroclor-1232		1600	U	
53469-21-9-----Aroclor-1242		9900	D	
12672-29-6-----Aroclor-1248		1600	U	
11097-69-1-----Aroclor-1254		5100	D	
11096-82-5-----Aroclor-1260		2200	D	
Surrogate amount spiked		16.76		

*Willyau
W.M.
7/13/01*

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061432.D\ECD1A.CH Vial: 32
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061432.D\ECD2B.CH
 Acq On : 15 Jun 2001 5:55 Operator: DDC
 Sample : 46676.10DL *E30G7DL * Inst : HP_15
 Misc : *EPA*30.6G/5.0ML*61 Dilution: 20.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 15 8:37 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.59	7.35	43834	37590	29.3	27.2
	Spiked Amount	16.759		Recovery	=	174.83%	162.30%
22)	S DCB	18.28	18.69	65721	65043	42.5	46.0
	Spiked Amount	16.759		Recovery	=	253.60%	274.48%

Target Compounds:

7)	L4 Aroclor-1242	0.00	10.40	0	109362	N.D. d	6503.4	#
9)	L4 Aroclor-1242 {3}	10.68f	0.00	80845	0	1335.0	N.D. d	#
10)	L4 Aroclor-1242 {4}	11.64	12.63	534451	297393	15589.7	16232.3	
11)	L4 Aroclor-1242 {5}	12.80	13.14	613215	440840	12901.4	17208.8	#
	Sum Aroclor-1242			1228511	847595	29826.0	39944.5	
	Average Aroclor-1242					9942.007	13314.849	

12)	L6 Aroclor-1254	12.62	0.00	390379	0	5636.7	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.31	0.00	309650	0	6993.4	N.D. d	#
14)	L6 Aroclor-1254 {3}	13.78	13.93	283726	220192	4609.4	7116.9	#
15)	L6 Aroclor-1254 {4}	14.31	14.92	246713	248347	4469.5	5623.8	#
16)	L6 Aroclor-1254 {5}	14.99	15.39	168843	236148	3636.2	4325.8	
	Sum Aroclor-1254			1399311	704687	25345.2	17066.6	
	Average Aroclor-1254					5069.035	5688.861	

17)	L7 Aroclor-1260	14.31	0.00	246713	0	2541.9	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.80	14.73	387724	418096	2970.8	4878.6	#
19)	L7 Aroclor-1260 {3}	15.25	14.92	418544	248347	3362.4	2449.0	#
20)	L7 Aroclor-1260 {4}	15.72	16.09	78105	55759	1098.8	958.0	
21)	L7 Aroclor-1260 {5}	16.16	16.32	156476	160326	1106.5	1136.3	
	Sum Aroclor-1260			1287562	882528	185693.6	157899.7	
	Average Aroclor-1260					2216.068	2355.469	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15061432.D XPCBF14.M Fri Jun 15 08:45:19 2001

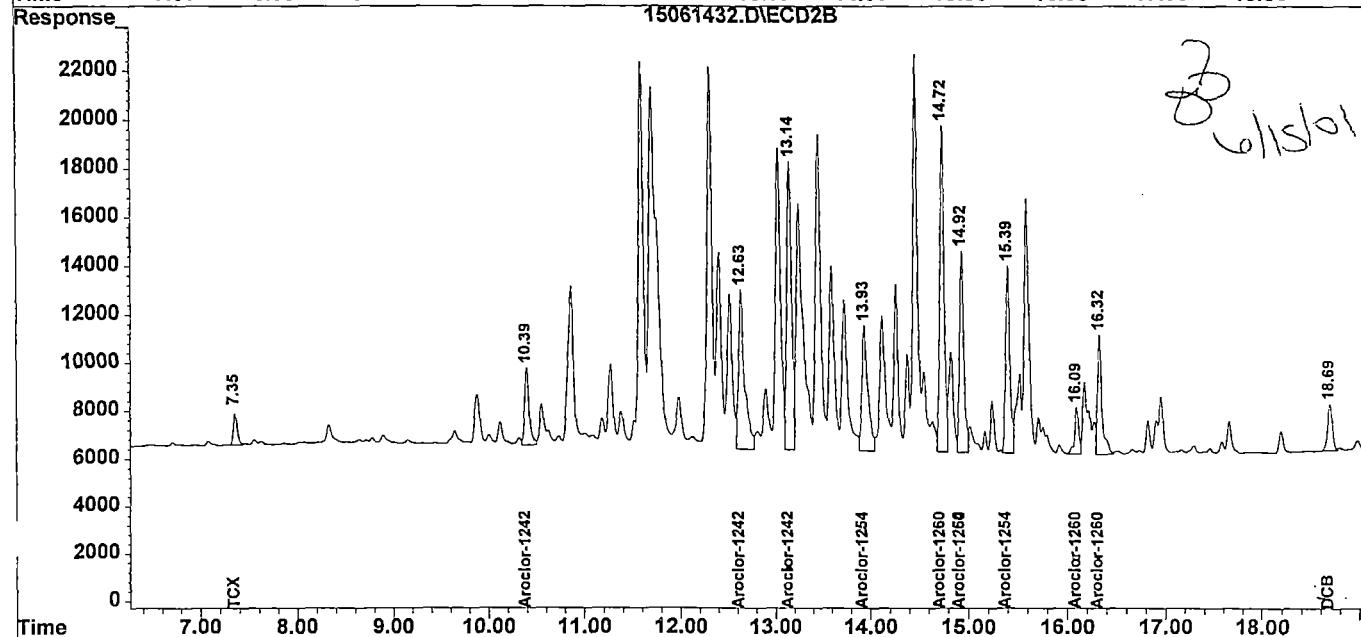
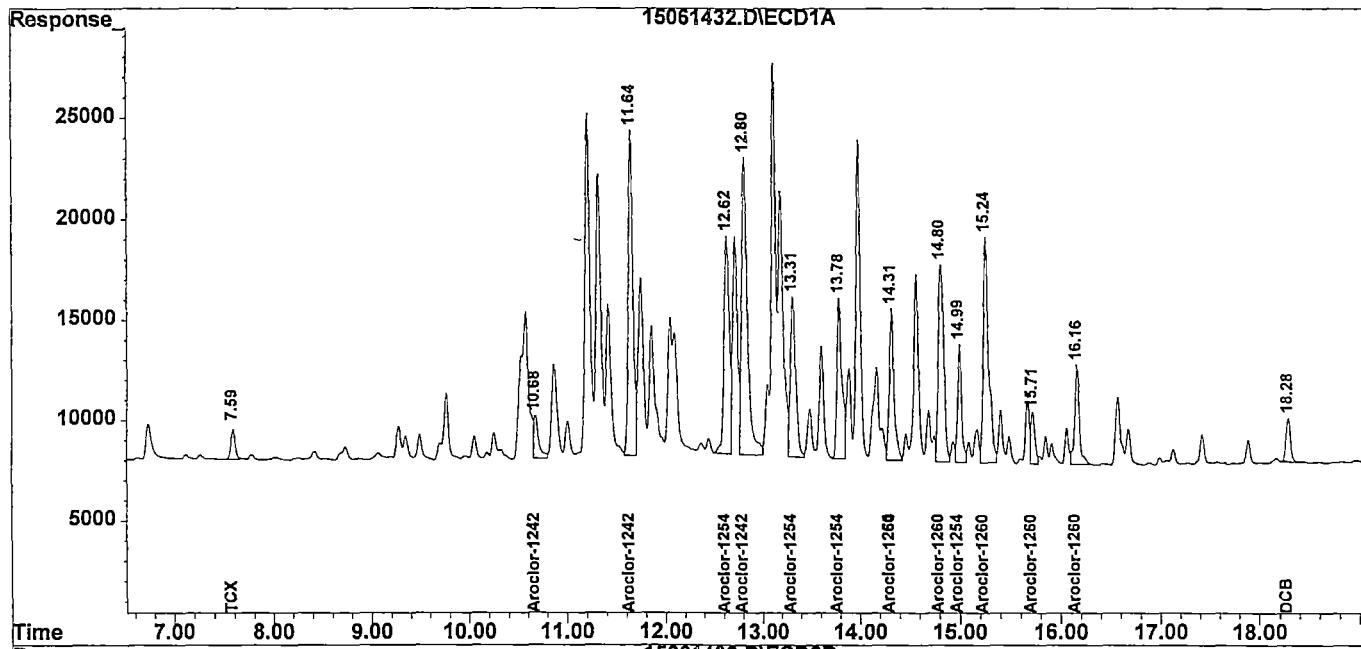
Page 1

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_14_01\15061432.D\ECD1A.CH Vial: 32
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_14_01\15061432.D\ECD2B.CH
 Acq On : 15 Jun 2001 5:55 Operator: DDC
 Sample : 46676.10DL *E30G7DL * Inst : HP_15
 Misc : *EPA*30.6G/5.0ML*61 Dilution: 20.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 15 8:37 2001 Quant Results File: XPCBF14.RES

Method : F:\HPCHEM\HP\15\DATA\06_14_01\XPCBF14.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_14_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL	Signal #2 Phase: DB-XLB
Signal #1 Phase : DB-17MS	Signal #2 Info : .32 mm
Signal #1 Info : .32 mm	Signal #2 Inst : HP_15B
Signal #1 Inst : HP_15A	



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30G8

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.11

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 42 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q		
12674-11-2-----	Aroclor-1016	56	U	
11104-28-2-----	Aroclor-1221	56	U	
11141-16-5-----	Aroclor-1232	56	U	
53469-21-9-----	Aroclor-1242	220	P	
12672-29-6-----	Aroclor-1248	56	U	
11097-69-1-----	Aroclor-1254	310		
11096-82-5-----	Aroclor-1260	120	P	
Surrogate amount spiked		11.41		


7/13/01

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_07_01\15060752.D\ECD1A.CH Vial: 33
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_07_01\15060752.D\ECD2B.CH
 Acq On : 09 Jun 2001 3:52 Operator: DDC
 Sample : 46676.11 *E30G8 * Inst : HP 15
 Misc : *EPA*30.2G/5.0ML*42 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 9 15:52 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
<hr/>							
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	266891	233447	7.370	6.675
	Spiked Amount	11.418		Recovery	=	64.55%	58.46%
22)	S DCB	18.28	18.68	387334	376034	11.0	10.6
	Spiked Amount	11.418		Recovery	=	96.34%	92.83%
<hr/>							
	Target Compounds:						
7)	L4 Aroclor-1242	0.00	10.39	0	158549	N.D. d	364.2 #
8)	L4 Aroclor-1242 {2}	9.70	11.17	24757	78447	39.9	89.1 #
9)	L4 Aroclor-1242 {3}	10.62	0.00	307289	0	219.2	N.D. d #
10)	L4 Aroclor-1242 {4}	0.00	12.62	0	327153	N.D. d	584.2 #
11)	L4 Aroclor-1242 {5}	12.80	0.00	453010	0	400.8	N.D. d #
	Sum Aroclor-1242			785057	564148	659.9	1037.5
	Average Aroclor-1242					219.969	345.826
12)	L6 Aroclor-1254	12.63	0.00	639332	0	345.8	N.D. d #
13)	L6 Aroclor-1254 {2}	13.31	0.00	417904	0	425.8	N.D. d #
14)	L6 Aroclor-1254 {3}	13.79	13.92	482993	417166	305.1	470.2 #
15)	L6 Aroclor-1254 {4}	14.31	14.92	384616	398779	313.1	319.9
16)	L6 Aroclor-1254 {5}	14.99	15.38	213140	343794	172.8	196.9
	Sum Aroclor-1254			2137985	1159739	1562.6	987.0
	Average Aroclor-1254					312.527	329.000
17)	L7 Aroclor-1260	14.31	0.00	384616	0	175.8	N.D. d #
18)	L7 Aroclor-1260 {2}	14.81	0.00	707416	0	237.6	N.D. d #
19)	L7 Aroclor-1260 {3}	15.25	14.92	657970	398779	239.3	167.1 #
20)	L7 Aroclor-1260 {4}	15.71	16.08	158728	117129	118.9	85.0 #
21)	L7 Aroclor-1260 {5}	0.00	16.32	0	334797	N.D. d	102.3 #
	Sum Aroclor-1260			1908730	850706	440.5	202.4
	Average Aroclor-1260					192.891	118.169

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

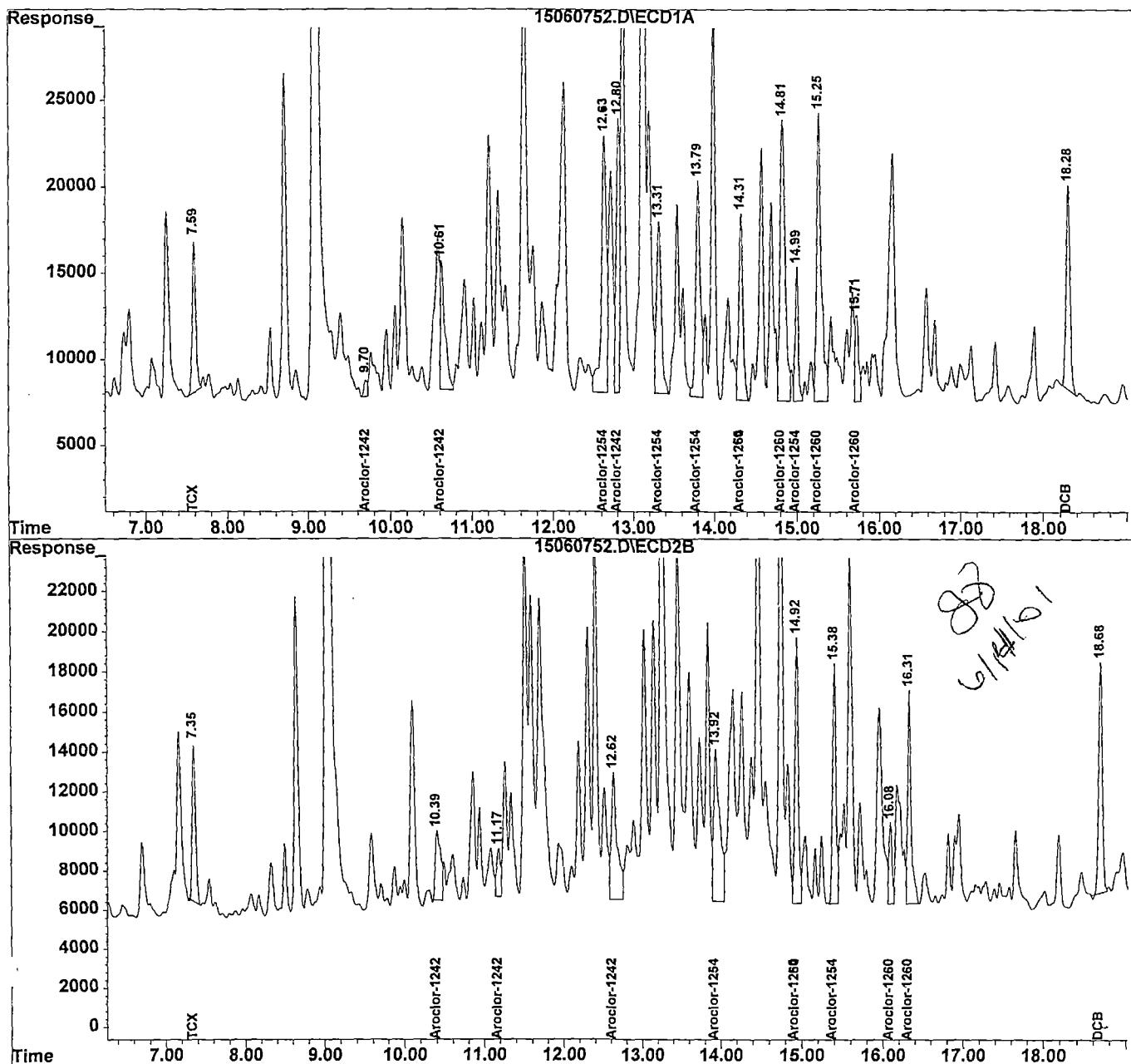
15060752.D XPCBE30.M Sat Jun 09 15:52:23 2001

Chromatographic Report

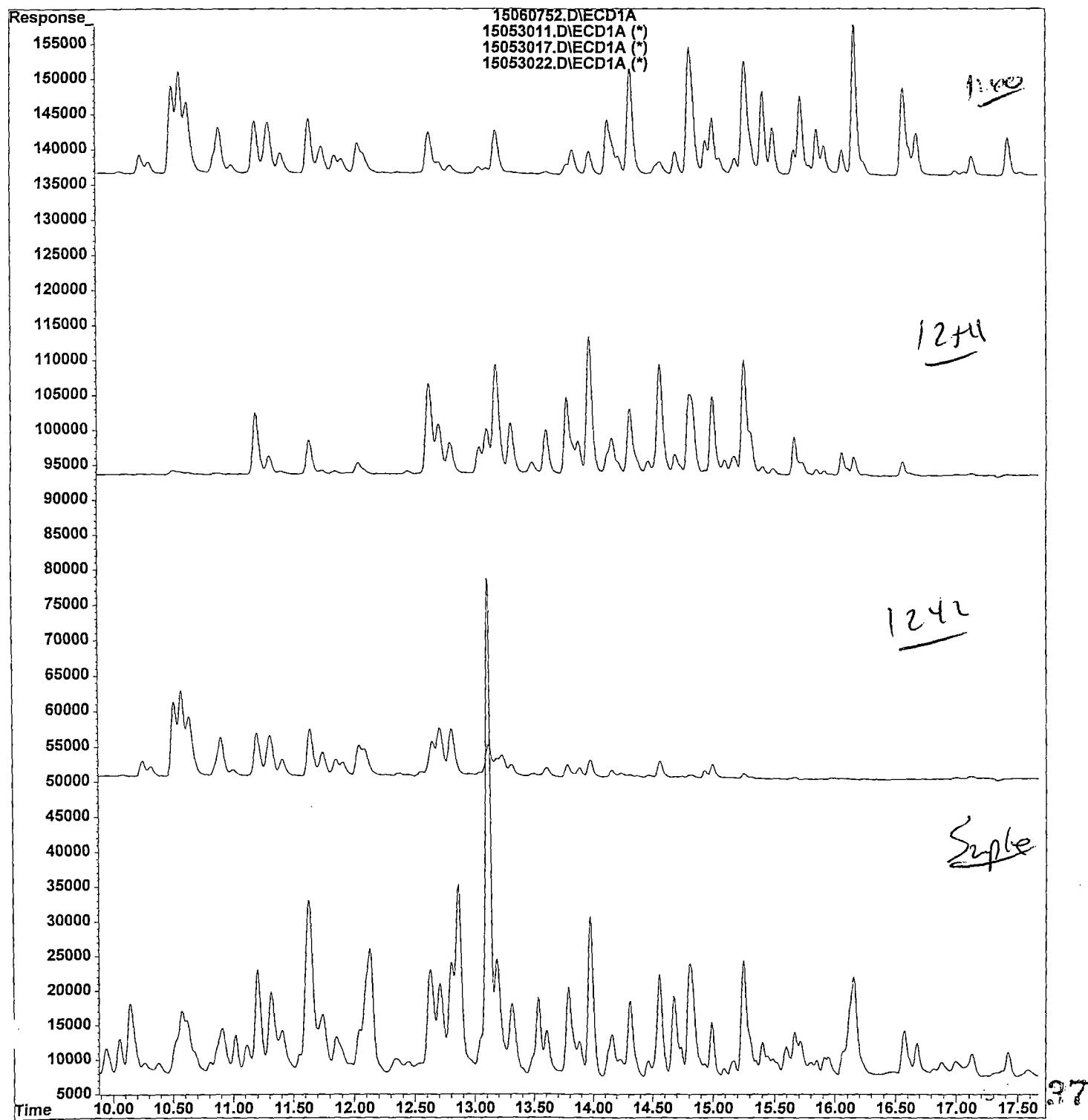
Signal #1 : F:\HPCHEM\HP\15\DATA\06_07_01\15060752.D\ECD1A.CH Vial: 33
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_07_01\15060752.D\ECD2B.CH
 Acq On : 09 Jun 2001 3:52 Operator: DDC
 Sample : 46676.11 *E30G8 * Inst : HP_15
 Misc : *EPA*30.2G/5.0ML*42 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 9 15:52 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj.	: 0.5uL		
Signal #1 Phase	: DB-17MS	Signal #2 Phase:	DB-XLB
Signal #1 Info	: .32 mm	Signal #2 Info	: .32 mm
Signal #1 Inst	: HP_15A	Signal #2 Inst	: HP_15B



File : F:\HPCHEM\HP\15\DATA\06_07_01\15060752.D
Operator : DDC
Acquired : 09 Jun 2001 3:52 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46676.11
Misc Info :
Vial Number: 33



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30G9

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.12

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 48 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/KG	Q
12674-11-2-----	Aroclor-1016	63	U	
11104-28-2-----	Aroclor-1221	63	U	
11141-16-5-----	Aroclor-1232	63	U	
53469-21-9-----	Aroclor-1242	90		
12672-29-6-----	Aroclor-1248	63	U	
11097-69-1-----	Aroclor-1254	68		
11096-82-5-----	Aroclor-1260	65	P	
Surrogate amount spiked		12.73		

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Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060753.D\ECD1A.CH Vial: 34
 Acq On : 09 Jun 2001 4:15 Operator: DDC
 Sample : 46676.12 *E30G9 * Inst : HP_15
 Misc : *EPA*30.2G/5.0ML*48 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060753.D\ECD2B.CH Vial: 34
 Acq On : 09 Jun 2001 4:15 Operator: DDC
 Sample : 46676.12 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:12 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
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System Monitoring Compounds:

1)	S TCX	7.59	7.35	283586	266614	8.735	8.503
	Spiked Amount	12.736			Recovery	=	68.59%
22)	S DCB	18.28	18.68	451301	438534	14.3	13.8
	Spiked Amount	12.736			Recovery	=	112.28%
							108.36%

Target Compounds:

7)	L4 Aroclor-1242	0.00	10.40	0	92899	N.D. d	238.0	#
9)	L4 Aroclor-1242 {3}	10.63	12.39	96782	33541	77.0	66.9	
10)	L4 Aroclor-1242 {4}	11.64	0.00	84341	0	100.8	N.D. d	#
11)	L4 Aroclor-1242 {5}	12.80	13.13	94116	59124	92.9	77.2	
	Sum Aroclor-1242			275239	185564	270.7	382.1	
	Average Aroclor-1242					90.219	127.350	
12)	L6 Aroclor-1254	12.63	12.29	101310	59594	61.1	112.7	#
13)	L6 Aroclor-1254 {2}	13.31	13.01	46956	26265	53.4	31.7	#
14)	L6 Aroclor-1254 {3}	13.79	13.93	184175	39205	129.8	49.3	#
15)	L6 Aroclor-1254 {4}	14.32	14.92	150821	99582	136.9	89.1	#
16)	L6 Aroclor-1254 {5}	14.99	15.38	47738	92553	43.2	59.1	#
	Sum Aroclor-1254			530999	317200	424.4	341.9	
	Average Aroclor-1254					84.876	68.384	
17)	L7 Aroclor-1260	14.32	0.00	150821	0	76.9	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.81	0.00	269886	0	101.1	N.D. d	#
19)	L7 Aroclor-1260 {3}	15.25	14.92	179577	99582	72.9	46.6	#
20)	L7 Aroclor-1260 {4}	15.71	16.08	183775	86348	153.5	69.9	#
21)	L7 Aroclor-1260 {5}	16.16	16.32	600054	231789	237.6	79.0	#
	Sum Aroclor-1260			1384113	417719	408.8	124.5	
Ave	ge Aroclor-1260					128.385	65.165	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060753.D XPCBE30.M Sat Jun 09 12:13:06 2001

Page 1

Chromatographic Report

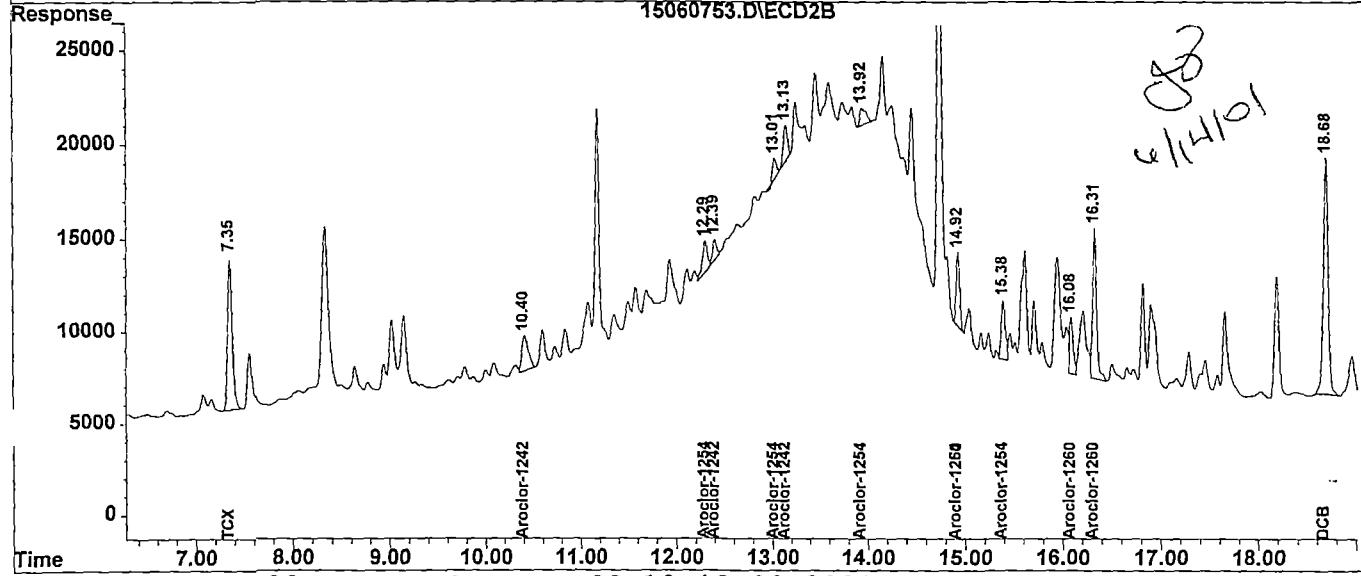
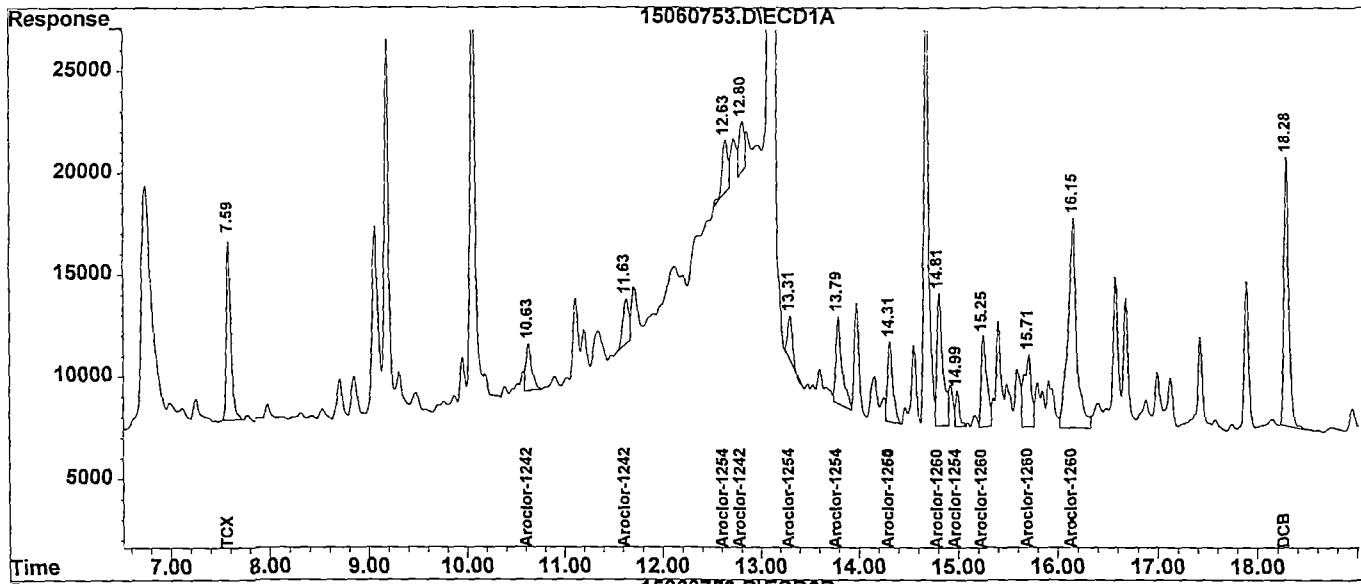
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 Sample : 46676.12 *E30G9 * Inst : HP 15
 Misc : *EPA*30.2G/5.0ML*48 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060753.D\ECD2B.CH Vial: 34
 Acq On : 09 Jun 2001 4:15 Operator: DDC
 Sample : 46676.12 Inst : HP 15
 Misc : Dilution: 1.00
 IntFile : events2.e
 Quant Time: Jun 9 12:12 2001 Quant Results File: XPCBE30.RES

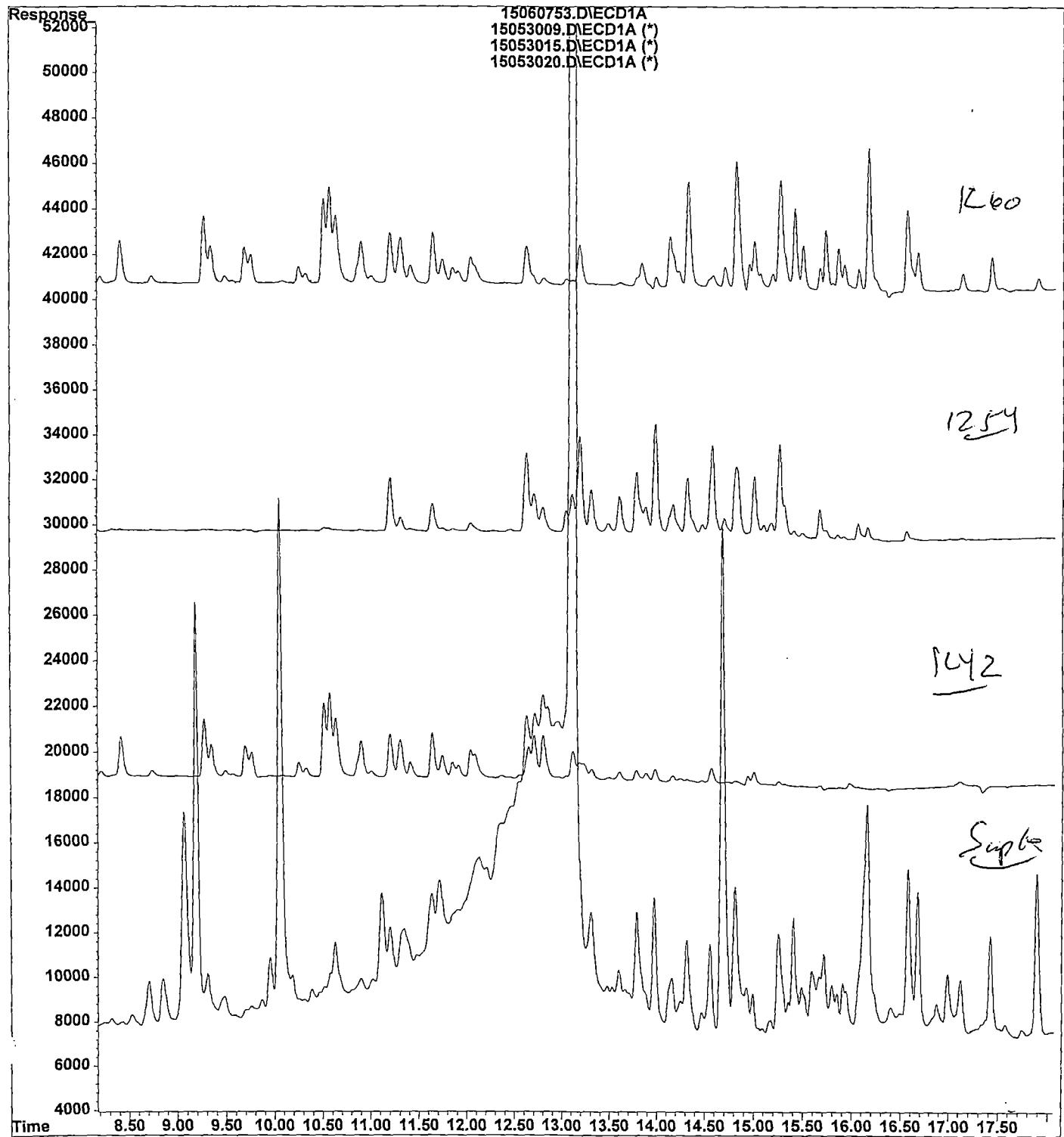
Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS
 Signal #1 Info : .32 mm
 Signal #1 Inst : HP_15A

Signal #2 Phase: DB-XLB
 Signal #2 Info : .32 mm
 Signal #2 Inst : HP_15B



File : F:\HPCHEM\HP\15\DATA\06_07_01\15060753.D
Operator : DDC
Acquired : 09 Jun 2001 4:15 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46676.12
Misc Info :
Vial Number: 34



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H0

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.13

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 48 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/09/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q		
12674-11-2-----Aroclor-1016		63	U	
11104-28-2-----Aroclor-1221		63	U	
11141-16-5-----Aroclor-1232		63	U	
53469-21-9-----Aroclor-1242		63	U	
12672-29-6-----Aroclor-1248		63	U	
11097-69-1-----Aroclor-1254		81		
11096-82-5-----Aroclor-1260		74	P	
Surrogate amount spiked		12.82		


Hilary Mather
7/13/01

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060754.D\ECD1A.CH Vial: 35
 Acq On : 09 Jun 2001 4:38 Operator: DDC
 Sample : 46676.13 *E30HO * Inst : HP_15
 Misc : *EPA*30G/5.0ML*48 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060754.D\ECD2B.CH Vial: 35
 Acq On : 09 Jun 2001 4:38 Operator: DDC
 Sample : 46676.13 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:16 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
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System Monitoring Compounds:

1) S TCX	7.59	7.35	277744	273843	8.612	8.792
Spiked Amount	12.821		Recovery	=	67.17%	68.58%
22) S DCB		18.28	491597	478274	15.7	15.1
Spiked Amount	12.821		Recovery	=	122.46%	117.78%

Target Compounds:

12) L6 Aroclor-1254	12.64	12.29	140719	47236	85.5	89.9m
13) L6 Aroclor-1254 {2}	13.31	0.00	23644	0	27.0	N.D. d #
15) L6 Aroclor-1254 {4}	14.32	14.92	175077	112287	160.0	101.1 #
16) L6 Aroclor-1254 {5}	14.99	15.38	56575	93972	51.5	60.4
Sum Aroclor-1254			396016	253495	324.0	251.5
Average Aroclor-1254					81.012	83.826
17) L7 Aroclor-1260	14.32	0.00	175077	0	89.8	N.D. d #
18) L7 Aroclor-1260 {2}	14.81	0.00	333083	0	125.6	N.D. d #
19) L7 Aroclor-1260 {3}	15.25	14.92	193768	112287	79.1	52.8 #
20) L7 Aroclor-1260 {4}	15.71	16.08	218505	85748	183.7	69.9 #
21) L7 Aroclor-1260 {5}	0.00	16.32	0	291943	N.D. d	100.2 #
Sum Aroclor-1260			920433	489978	306.6	142.9
Average Aroclor-1260					119.575	74.311

POC
6-7-21

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060754.D XPCBE30.M Sat Jun 09 12:16:30 2001

Page 1

Chromatographic Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060754.D\ECD1A.CH Vial: 35
 Acq On : 09 Jun 2001 4:38 Operator: DDC
 Sample : 46676.13 *E30HO * Inst : HP_15
 Misc : *EPA*30G/5.0ML*48 Dilution: 1.00
 IntFile : events.e

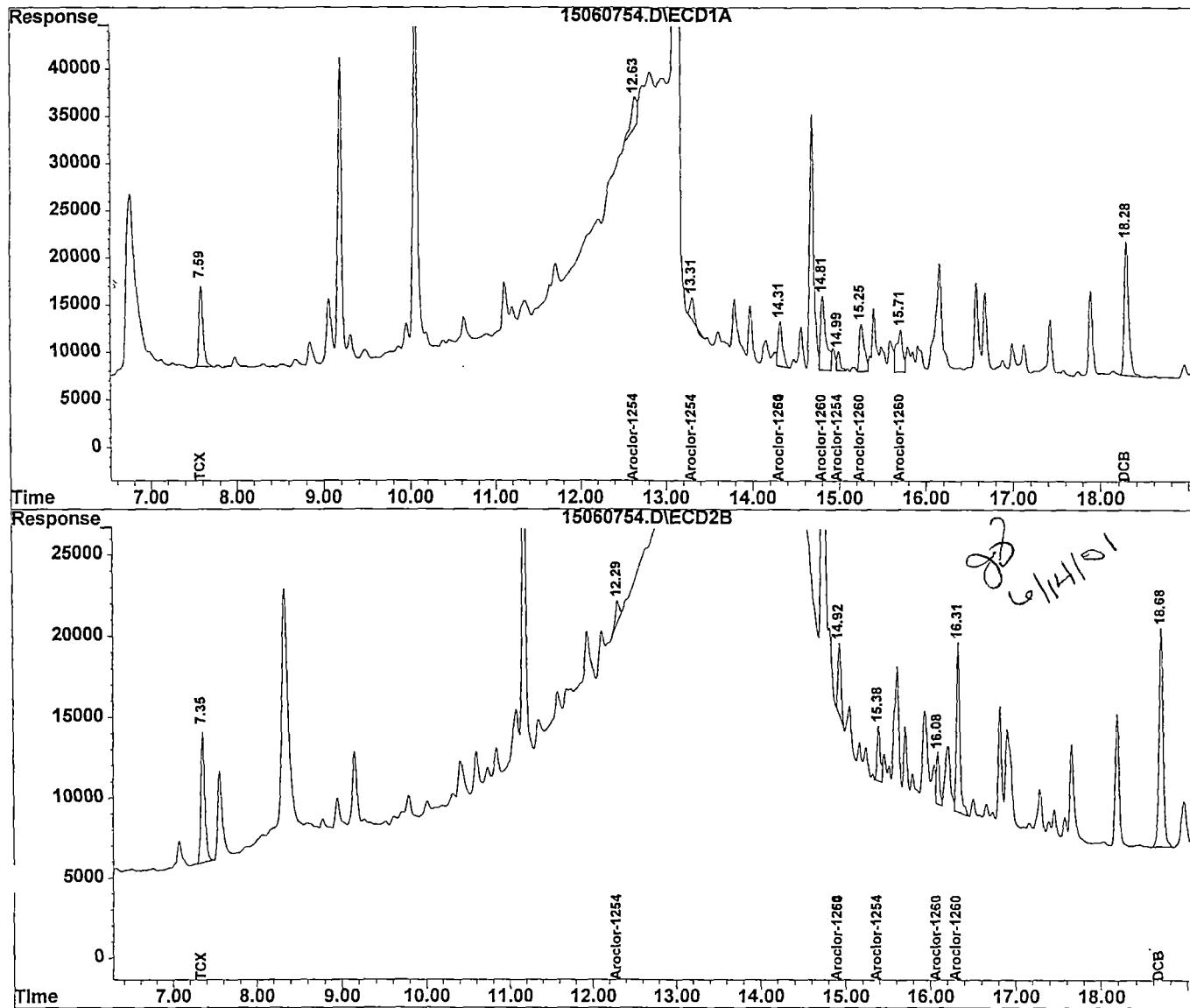
Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060754.D\ECD2B.CH Vial: 35
 Acq On : 09 Jun 2001 4:38 Operator: DDC
 Sample : 46676.13 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:16 2001 Quant Results File: XPCBE30.RES

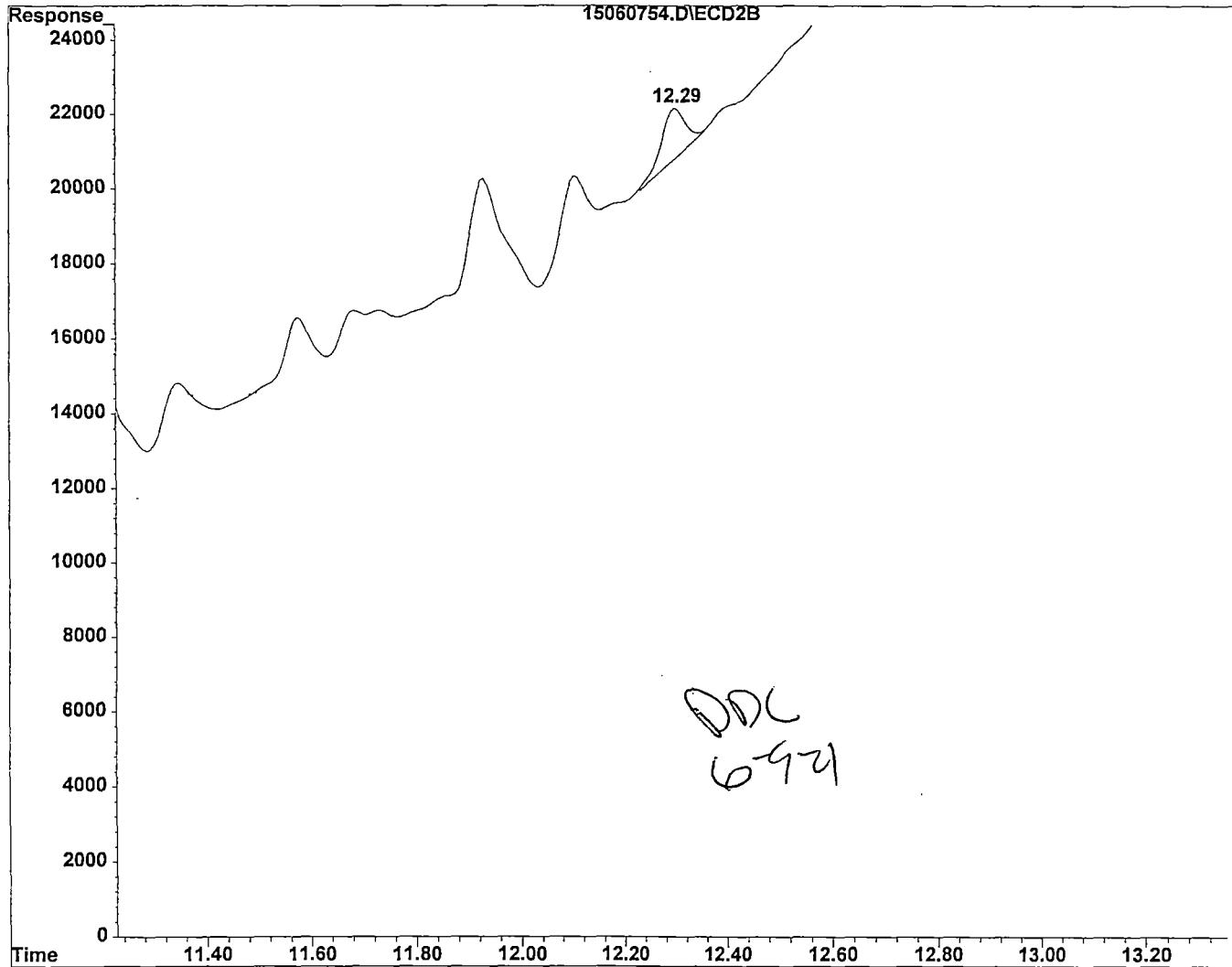
Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS
 Signal #1 Info : .32 mm
 Signal #1 Inst : HP_15A

Signal #2 Phase: DB-XLB
 Signal #2 Info : .32 mm
 Signal #2 Inst : HP_15B



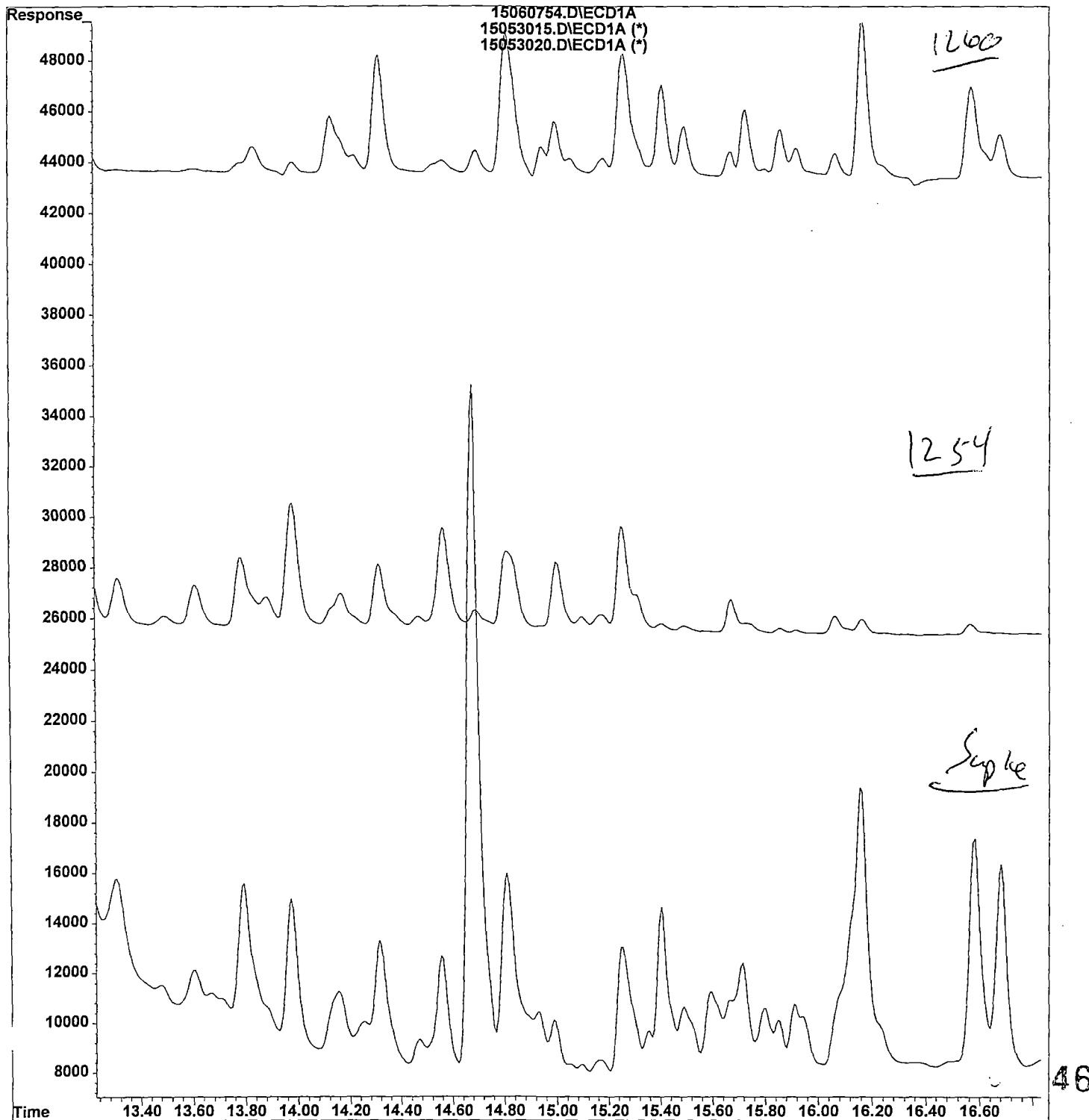
MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\15\DATA\06_07_01\15060754.D
Date Acquired: 09 Jun 2001 4:38
Inst: HP 15 Operator ID: DDC
Name: 46676.13
Misc:
Method: F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
Title: PCB/TOXAPHENE
Quant Time: Jun 9 12:16 2001 Quant Results File: XPCBE30.RES



Aroclor-1254 #2 12.29min area: 47236 m

Integration Time Range: 12.23 - 12.35

File : F:\HPCHEM\HP\15\DATA\06_07_01\15060754.D
Operator : DDC
Acquired : 09 Jun 2001 4:38 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46676.13
Misc Info :
Vial Number: 35



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30H1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.14

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 57 decanted: (Y/N) ___ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/09/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q		
12674-11-2-----Aroclor-1016		76	U	
11104-28-2-----Aroclor-1221		76	U	
11141-16-5-----Aroclor-1232		76	U	
53469-21-9-----Aroclor-1242		2100	E	2600 D
12672-29-6-----Aroclor-1248		76	U	
11097-69-1-----Aroclor-1254		1200	E	1800 D
11096-82-5-----Aroclor-1260		740	E	930 D
Surrogate amount spiked		15.36		

*Bilay
Watson
7/13/01*

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060755.D\ECD1A.CH Vial: 36
 Acq On : 09 Jun 2001 5:02 Operator: DDC
 Sample : 46676.14 *E30H1 * Inst : HP_15
 Misc : *EPA*30.3G/5.0ML*57 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060755.D\ECD2B.CH Vial: 36
 Acq On : 09 Jun 2001 5:02 Operator: DDC
 Sample : 46676.14 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e
 Quant Time: Jun 9 12:18 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.59	7.35	356362	348343	13.2	13.4
	Spiked Amount	15.350		Recovery	=	85.99%	87.29%
22)	S DCB	18.28	18.68	564991	587013	21.6	22.3
	Spiked Amount	15.350		Recovery	=	140.71%	145.27%

Target Compounds:

9)	L4 Aroclor-1242 {3}	10.58f	12.39	1615871	969751	1549.9 E	2330.4 E#
10)	L4 Aroclor-1242 {4}	11.64	12.62	1514957	939273	2181.6 E	2255.0 E
11)	L4 Aroclor-1242 {5}	12.80	13.13	2208100	1752360	2626.4 E	2756.7 E
	Sum Aroclor-1242			5338927	3661384	6357.9	7342.1
	Average Aroclor-1242					2119.286	2447.356
12)	L6 Aroclor-1254	12.63	0.00	1482900	0	1078.2 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.31	13.01	1281095	1519538	1754.7 E	2212.0 E#
14)	L6 Aroclor-1254 {3}	13.79	13.92	1310832	678931	1113.3 E	1028.8 E
15)	L6 Aroclor-1254 {4}	14.31	14.92	1189874	1389502	1302.2 E	1498.4 E
16)	L6 Aroclor-1254 {5}	14.99	15.38	914713	1368536	997.3	1053.8 E
	Sum Aroclor-1254			6179414	4956507	6245.7	5793.0
	Average Aroclor-1254					1249.147	1448.254

17)	L7 Aroclor-1260	14.31	0.00	1189874	0	731.1	N.D. d #
18)	L7 Aroclor-1260 {2}	14.80	14.72	1898808	2142258	857.4	1382.7 E#
19)	L7 Aroclor-1260 {3}	15.25	14.92	2270697	1389502	1110.4 E	783.0 #
20)	L7 Aroclor-1260 {4}	15.72	16.08	501382	372902	504.7	363.9 #
21)	L7 Aroclor-1260 {5}	16.16	16.32	1171739	1045414	559.2	429.6
	Sum Aroclor-1260			7032499	4950076	2888.0	2271.2
	Average Aroclor-1260					752.562	739.799

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060755.D XPCBE30.M Sat Jun 09 12:18:59 2001

Page 1

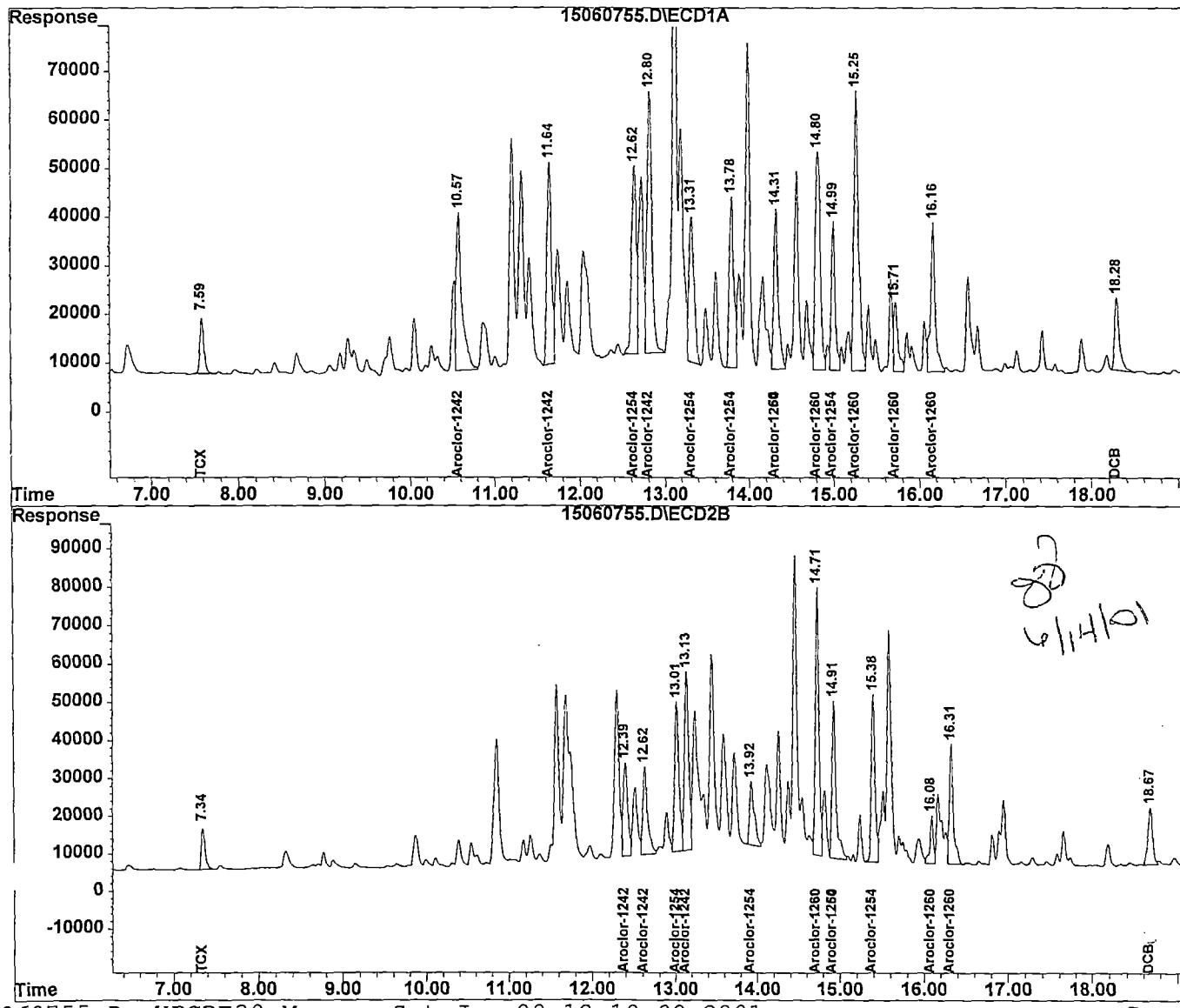
Chromatographic Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060755.D\ECD1A.CH Vial: 36
 Acq On : 09 Jun 2001 5:02 Operator: DDC
 Sample : 46676.14 *E30H1 * Inst : HP_15
 Misc : *EPA*30.3G/5.0ML*57 Dilution: 1.00
 IntFile : events.e

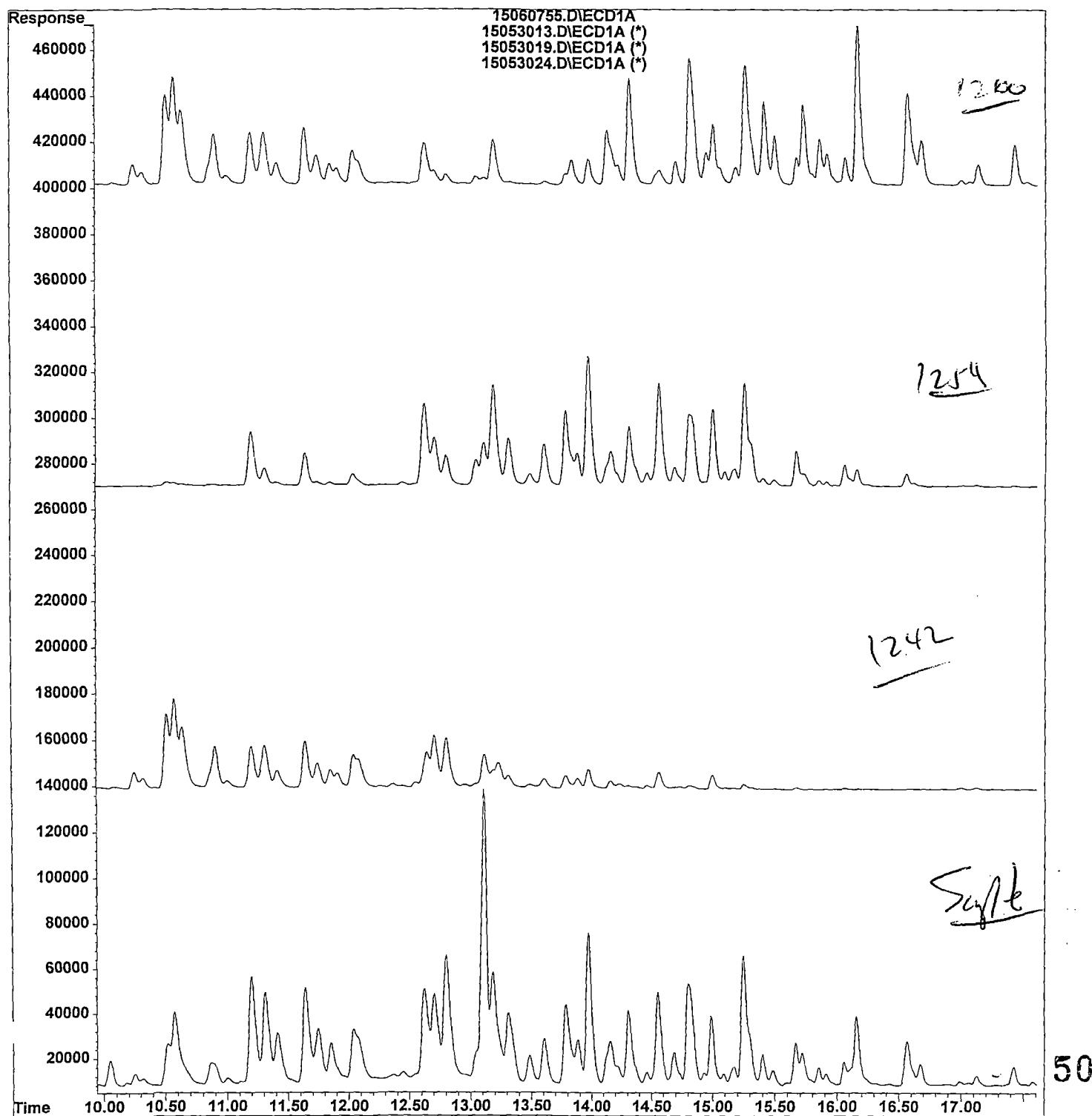
Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060755.D\ECD2B.CH Vial: 36
 Acq On : 09 Jun 2001 5:02 Operator: DDC
 Sample : 46676.14 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e
 Quant Time: Jun 9 12:18 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



File : F:\HPCHEM\HP\15\DATA\06_07_01\15060755.D
Operator : DDC
Acquired : 09 Jun 2001 5:02 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46676.14
Misc Info :
Vial Number: 36



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H1DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.14DL

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 57 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG Q
12674-11-2-----	Aroclor-1016	380	U
11104-28-2-----	Aroclor-1221	380	U
11141-16-5-----	Aroclor-1232	380	U
53469-21-9-----	Aroclor-1242	2600	D
12672-29-6-----	Aroclor-1248	380	U
11097-69-1-----	Aroclor-1254	1800	D
11096-82-5-----	Aroclor-1260	930	D
Surrogate amount spiked		15.36	

*W. Day
MM total
7/13/01*

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060904.D\ECD1A.CH Vial: 4
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060904.D\ECD2B.CH
 Acq On : 09 Jun 2001 17:21 Operator: DDC
 Sample : 46676.14DL *E30H1DL * Inst : HP 15
 Misc : *EPA*30.3G/5.0ML*57 Dilution: 5.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 10 10:12 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S TCX	7.59	7.35	97852	75494	18.2	14.5
Spiked Amount	15.350		Recovery	=	118.56%	94.46%
22) S DCB	18.29	18.68	97386	98436	18.6	18.7
Spiked Amount	15.350		Recovery	=	121.17%	121.82%

Target Compounds:

7) L4 Aroclor-1242	0.00	10.39	0	65423	N.D. d	1010.2	#
8) L4 Aroclor-1242 {2}	9.77f	0.00	139379	0	1509.0	N.D. d	#
9) L4 Aroclor-1242 {3}	10.58f	12.40	667337	259291	3200.4	3115.4	
10) L4 Aroclor-1242 {4}	11.65	12.63	468277	265521	3371.7	3187.3	
11) L4 Aroclor-1242 {5}	0.00	13.14	0	414022	N.D. d	3256.6	#
Sum Aroclor-1242			1274994	1004257	8081.1	10569.5	
Average Aroclor-1242					2693.696	2642.370	
12) L6 Aroclor-1254	12.63	0.00	472905	0	1719.2	N.D. d	#
13) L6 Aroclor-1254 {2}	13.32	13.02	369293	396730	2529.1	2887.6	
14) L6 Aroclor-1254 {3}	13.79	13.93	359869	210922	1528.3	1598.1	
15) L6 Aroclor-1254 {4}	14.32	14.92	371329	342523	2032.0	1846.9	
16) L6 Aroclor-1254 {5}	15.00	15.39	237691	341634	1295.7	1315.3	
Sum Aroclor-1254			1811087	1291808	9104.2	7647.9	
Average Aroclor-1254					1820.845	1911.967	
17) L7 Aroclor-1260	14.32	0.00	371329	0	1140.8	N.D. d	#
18) L7 Aroclor-1260 {2}	14.81	14.72	546612	564507	1234.0	1821.8	#
19) L7 Aroclor-1260 {3}	15.25	14.92	592264	342523	1448.2	965.0	#
20) L7 Aroclor-1260 {4}	15.72	16.09	135664	92039	682.8	449.1	#
21) L7 Aroclor-1260 {5}	16.16	16.32	237038	231549	565.6	475.7	
Sum Aroclor-1260			1882908	1230618	19462.1	14244.0	
Average Aroclor-1260					1014.289	927.925	

 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

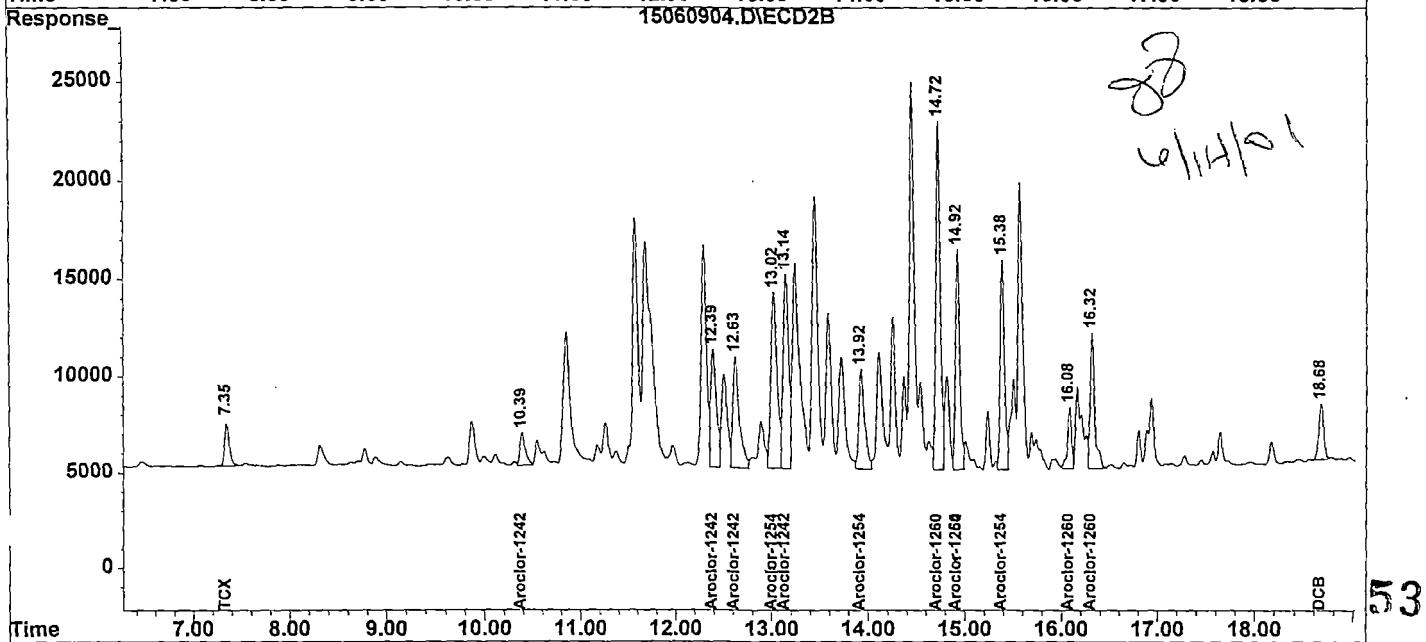
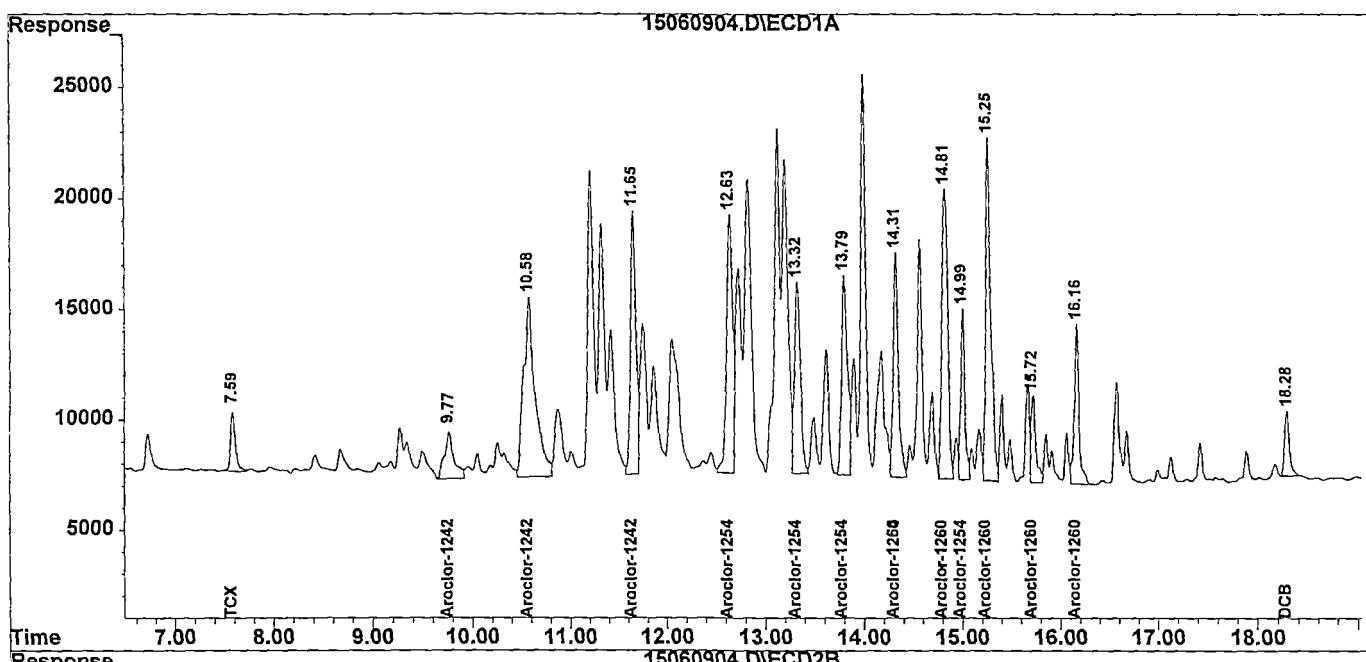
15060904.D XPCBE30.M Sun Jun 10 10:26:46 2001

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060904.D\ECD1A.CH Vial: 4
Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060904.D\ECD2B.CH
Acq On : 09 Jun 2001 17:21 Operator: DDC
Sample : 46676.14DL *E30H1DL * Inst : HP_15
Misc : *EPA*30.3G/5.0ML*57 Dilution: 5.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 10 10:12 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP 15A Signal #2 Inst : HP 15B



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H2

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.15

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 60 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2-----	Aroclor-1016	820		U
11104-28-2-----	Aroclor-1221	820		U
11141-16-5-----	Aroclor-1232	820		U
53469-21-9-----	Aroclor-1242	23000		E
12672-29-6-----	Aroclor-1248	820		U
11097-69-1-----	Aroclor-1254	5600		
11096-82-5-----	Aroclor-1260	1700		P
Surrogate amount spiked		16.61		

TR
7/16/01

D. Johnson
7/13/01

54

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060906.D\ECD1A.CH Vial: 6
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060906.D\ECD2B.CH
 Acq On : 09 Jun 2001 18:08 Operator: DDC
 Sample : 46676.15 *E30H2 * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*60 Dilution: 10.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 10 10:13 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.59	7.35	44933	32537	18.1	13.5	#
	Spiked Amount	16.611		Recovery	=	108.96%	81.27%	
22)	S DCB	18.29	18.68	51094	62144	21.1	25.5	
	Spiked Amount	16.611		Recovery	=	127.02%	153.51%	

Target Compounds:

9)	L4 Aroclor-1242 {3}	10.58f	12.40	2044012	837913	21215.7	E	21789.4	E
10)	L4 Aroclor-1242 {4}	11.65	12.63	1499996	1088959	23374.9	E	28290.9	E
11)	L4 Aroclor-1242 {5}	12.82	13.15	1842879	1363184	23720.3	E	23206.6	E
	Sum Aroclor-1242			5386887	3290056	68310.9		73286.9	
	Average Aroclor-1242					22770.312		24428.958	

12)	L6 Aroclor-1254	12.64	0.00	823495	0	6479.3		N.D.	d #
14)	L6 Aroclor-1254 {3}	13.79	13.93	584047	479349	5368.0		7860.5	#
15)	L6 Aroclor-1254 {4}	14.32	14.92	476198	439132	5639.7		5124.5	
16)	L6 Aroclor-1254 {5}	15.00	15.39	405056	529191	4778.9		4409.4	
	Sum Aroclor-1254			2288797	1447671	22266.0		17394.4	
	Average Aroclor-1254					5566.488		5798.147	

17)	L7 Aroclor-1260	14.32	0.00	476198	0	3166.2		N.D.	d #
18)	L7 Aroclor-1260 {2}	14.81	0.00	678949	0	3317.5		N.D.	d #
19)	L7 Aroclor-1260 {3}	15.25	14.92	732575	439132	3876.8		2677.7	#
20)	L7 Aroclor-1260 {4}	15.72	16.09	159468	107425	1737.1		1134.5	#
21)	L7 Aroclor-1260 {5}	16.16	16.32	264513	280252	1366.1		1246.2	
	Sum Aroclor-1260			2311703	826808	111824.5		42013.7	
	Average Aroclor-1260					2692.733		1686.150	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060906.D XPCBE30.M Sun Jun 10 10:27:07 2001

Page 1

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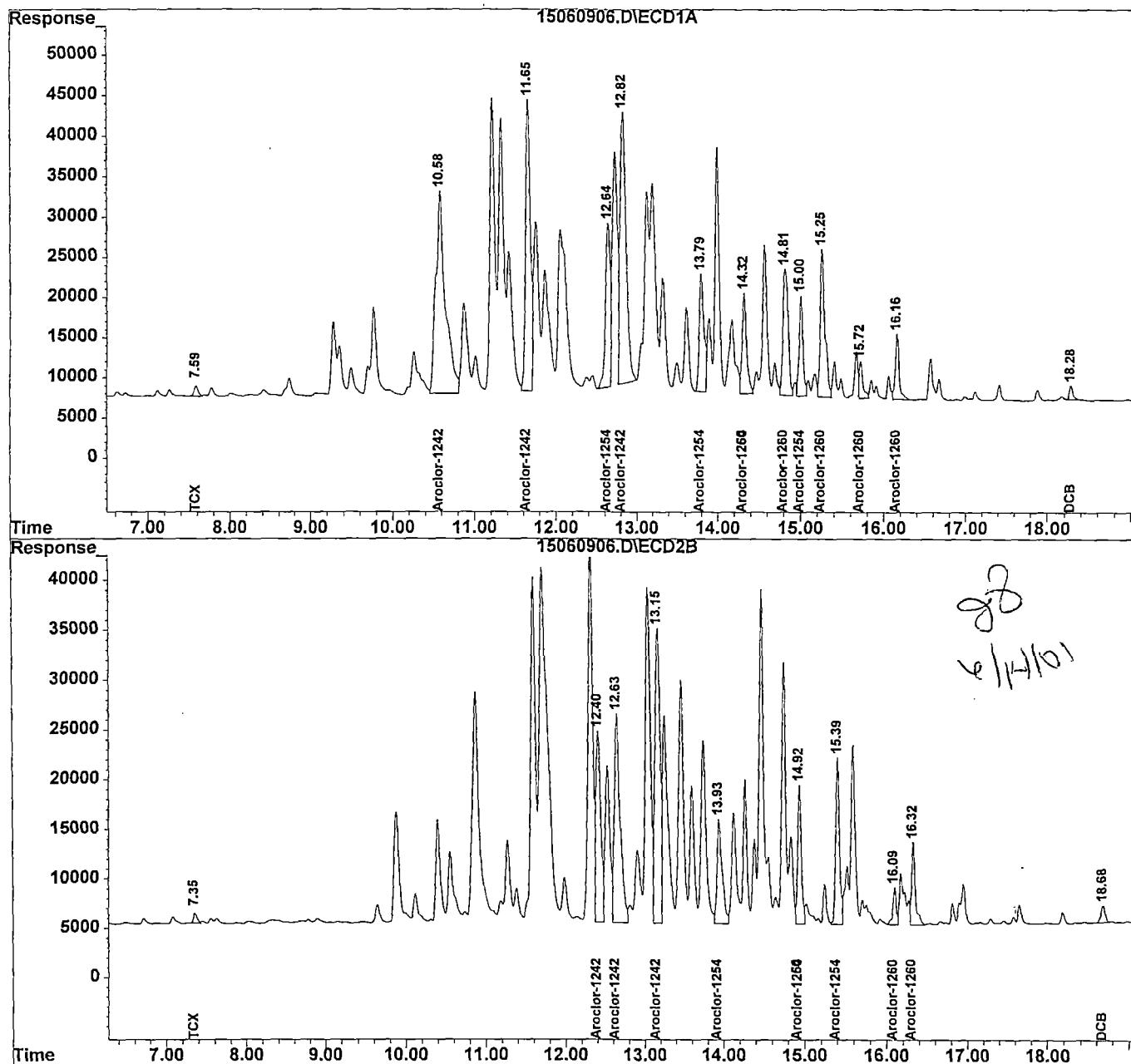
55

Chromatographic Report

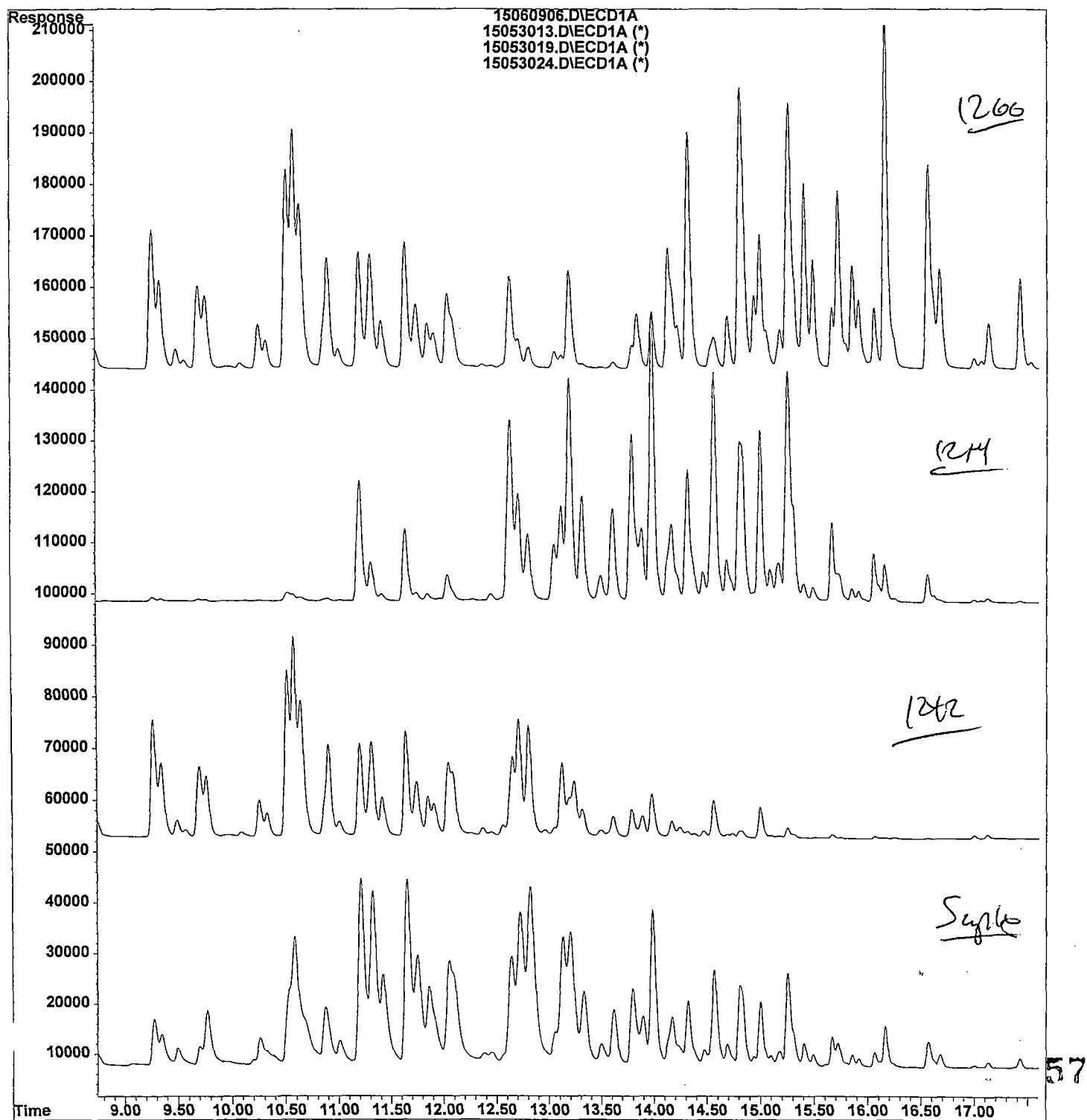
Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060906.D\ECD1A.CH Vial: 6
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060906.D\ECD2B.CH
 Acq On : 09 Jun 2001 18:08 Operator: DDC
 Sample : 46676.15 *E30H2 * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*60 Dilution: 10.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 10 10:13 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



File : F:\HPCHEM\HP\15\DATA\06_09_01\15060906.D
Operator : DDC
Acquired : 09 Jun 2001 18:08 using AcqMethod OLM03.M
Instrument : HP 15
Sample Name: 46676.15
Misc Info :
Vial Number: 6



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H2DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.15DL

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 60 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/13/01

Injection Volume: 0.5 (uL) Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2-----	Aroclor-1016	8200	U	J
11104-28-2-----	Aroclor-1221	8200	U	
11141-16-5-----	Aroclor-1232	8200	U	
53469-21-9-----	Aroclor-1242	26000	DPI	
12672-29-6-----	Aroclor-1248	8200	U	
11097-69-1-----	Aroclor-1254	10000	D	
11096-82-5-----	Aroclor-1260	3600	DJ	
Surrogate amount spiked		16.61		

Hillary
Matthew
7/13/01

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_12_01\15061261.D\ECD1A.CH Vial: 61
 Acq On : 13 Jun 2001 11:40 Operator: DDC
 Sample : 46676.15DL *E30H2DL * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*60 Dilution: 100.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_12_01\15061261.D\ECD2B.CH Vial: 61
 Acq On : 13 Jun 2001 11:40 Operator: DDC
 Sample : 46676.15DL Inst : HP_15
 Misc : Dilution: 100.00
 IntFile : events2.e
 Quant Time: Jun 13 13:04 2001 Quant Results File: XPCBF12.RES

Method : F:\HPCHEM\HP\15\DATA\06_12_01\XPCBF12.M
 Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\15\DATA\06_12_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.60	7.36	5589	4283	20.1	20.3
	Spiked Amount	16.611		Recovery	=	121.00%	122.21%
22)	S DCB	18.30	18.69	4479	3785	27.0	30.7
	Spiked Amount	16.611		Recovery	=	162.54%	184.81%

Target Compounds:

7)	L4 Aroclor-1242	0.00	10.40	0	48836	N.D.	21816.5	#
9)	L4 Aroclor-1242 {3}	10.69f	12.40	98771	125263	7719.2	54543.4	#
10)	L4 Aroclor-1242 {4}	11.67	0.00	214289	0	38279.9	N.D.	d #
11)	L4 Aroclor-1242 {5}	12.86f	13.19	291857	113237	31848.2	43649.8	#
	Sum Aroclor-1242			604918	287336	77847.3	120009.7	
	Average Aroclor-1242					25949.112	40003.248	

12)	L6 Aroclor-1254	12.66	0.00	126074	0	9028.0	N.D.	d #
13)	L6 Aroclor-1254 {2}	13.35	0.00	128723	0	14538.2	N.D.	d #
14)	L6 Aroclor-1254 {3}	13.82	13.95	87043	74508	9226.8	18107.1	#
15)	L6 Aroclor-1254 {4}	14.34	14.94	87824	68732	9049.2	9892.9	
16)	L6 Aroclor-1254 {5}	15.02	15.40	50073	59355	8070.5	10464.4	#
	Sum Aroclor-1254			479737	202595	49912.7	38464.5	
	Average Aroclor-1254					9982.536	12821.494	

17)	L7 Aroclor-1260	14.34	0.00	87824	0	4632.8	N.D.	d #
18)	L7 Aroclor-1260 {2}	14.84	14.74	98266	102971	5181.1	6519.3	#
19)	L7 Aroclor-1260 {3}	15.27	14.94	87027	68732	4990.3	4733.9	
20)	L7 Aroclor-1260 {4}	15.73	16.10	23368	15049	1809.3	1810.4	
21)	L7 Aroclor-1260 {5}	16.18	16.33	27241	35526	1396.2	2157.5	#
	Sum Aroclor-1260			323727	222278	1495825.8	1264201.2	
	Average Aroclor-1260					3601.948	3805.246	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15061261.D XPCBF12.M Wed Jun 13 13:05:12 2001

Page 1

Chromatographic Report

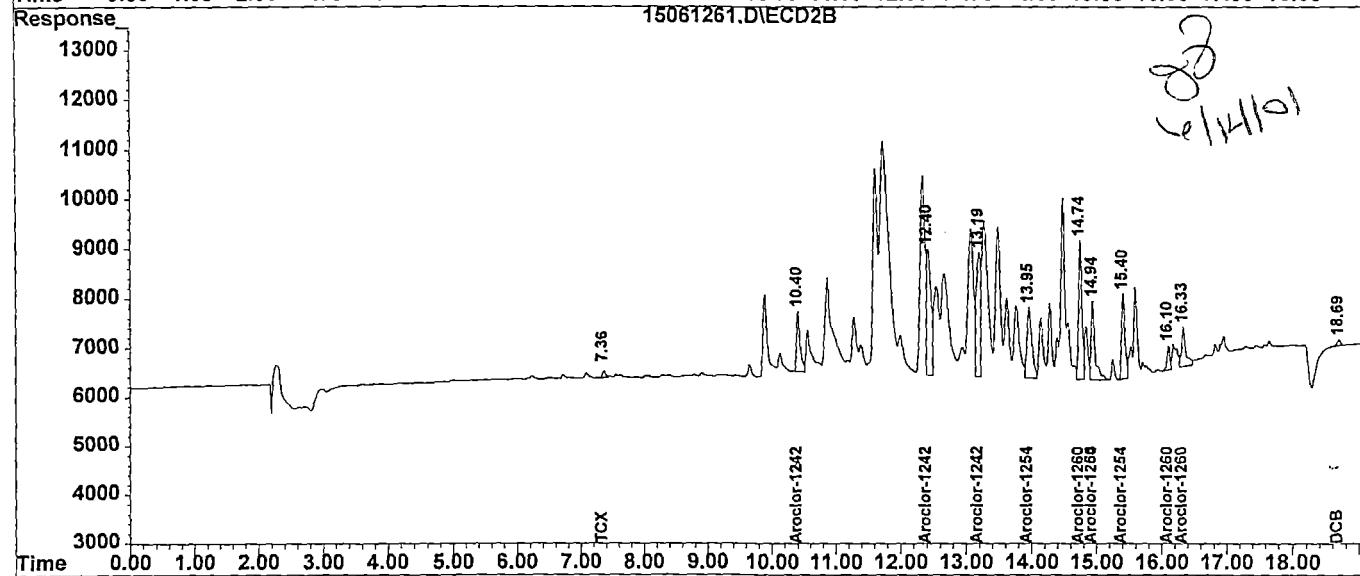
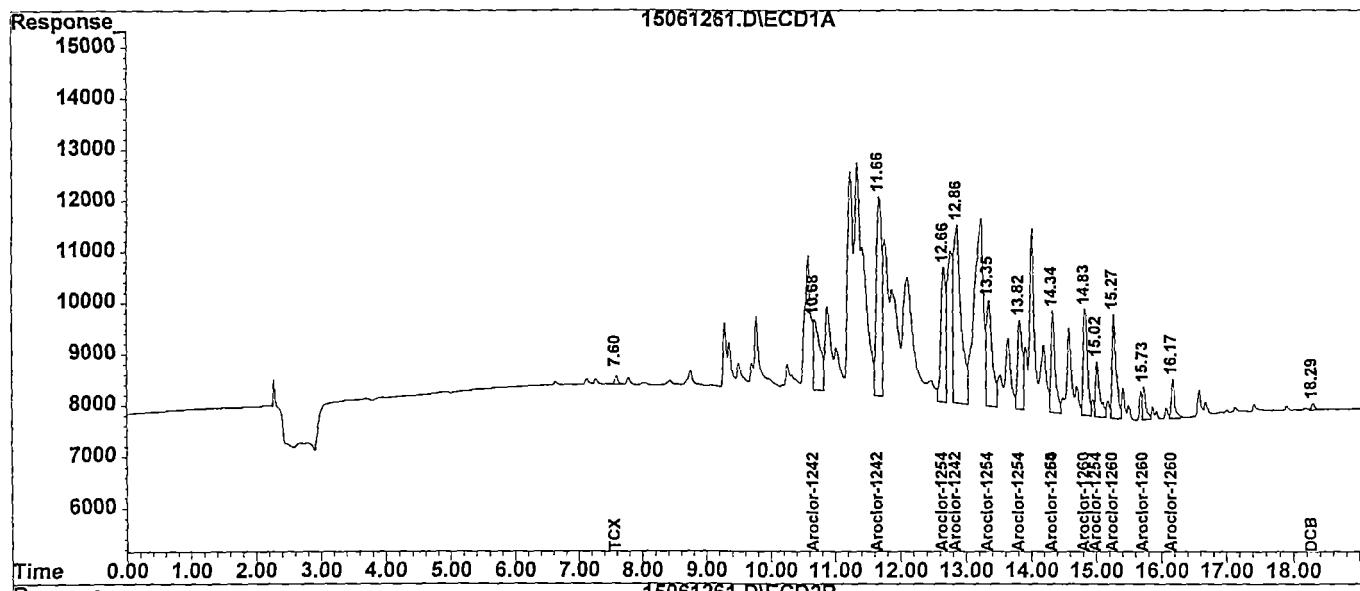
Data File : F:\HPCHEM\HP\15\DATA\06_12_01\15061261.D\ECD1A.CH Vial: 61
 Acq On : 13 Jun 2001 11:40 Operator: DDC
 Sample : 46676.15DL *E30H2DL * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*60 Dilution: 100.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_12_01\15061261.D\ECD2B.CH Vial: 61
 Acq On : 13 Jun 2001 11:40 Operator: DDC
 Sample : 46676.15DL Inst : HP_15
 Misc : Dilution: 100.00
 IntFile : events2.e

Quant Time: Jun 13 13:04 2001 Quant Results File: XPCBF12.RES

Method : F:\HPCHEM\HP\15\DATA\06_12_01\XPCBF12.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_12_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H3

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.16

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 46 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/09/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
		61	U	
12674-11-2-----Aroclor-1016		61	U	
11104-28-2-----Aroclor-1221		61	U	
11141-16-5-----Aroclor-1232		61	U	
53469-21-9-----Aroclor-1242		750	E	1000 D
12672-29-6-----Aroclor-1248		61	U	
11097-69-1-----Aroclor-1254		240		
11096-82-5-----Aroclor-1260		130		
Surrogate amount spiked		12.30		

TTS
7/16/01

Hilary
Natalie
7/13/01

61

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060757.D\ECD1A.CH Vial: 38
 Acq On : 09 Jun 2001 5:48 Operator: DDC
 Sample : 46676.16 *E30H3 * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*46 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060757.D\ECD2B.CH Vial: 38
 Acq On : 09 Jun 2001 5:48 Operator: DDC
 Sample : 46676.16 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:24 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.59	7.35	338431	327863	10.1	10.1
	Spiked Amount	12.305		Recovery	=	82.08%	82.08%
22)	S DCB	18.28	18.68	520592	509454	16.0	15.5
	Spiked Amount	12.305		Recovery	=	130.03%	125.97%

Target Compounds:

7)	L4 Aroclor-1242	0.00	10.39	0	296784	N.D. d	734.6 #
8)	L4 Aroclor-1242 {2}	0.00	11.17	0	911869	N.D. d	1115.7 E#
9)	L4 Aroclor-1242 {3}	10.58f	12.39	965346	387378	742.2	746.2
10)	L4 Aroclor-1242 {4}	11.64	12.62	756443	478634	873.2 E	921.1 E
11)	L4 Aroclor-1242 {5}	12.80	13.13	680860	821744	649.2	1036.2 E#
	Sum Aroclor-1242			2402649	2896409	2264.5	4553.9
	Average Aroclor-1242					754.845	910.779
12)	L6 Aroclor-1254	12.64	13.92f	332485	168340	193.8	307.5m #
14)	L6 Aroclor-1254 {3}	13.78	13.92	364513	536566	248.2	651.8 #
15)	L6 Aroclor-1254 {4}	14.31	14.92	320827	246084	281.5	212.7
16)	L6 Aroclor-1254 {5}	14.99	15.38	249512	358389	218.1	221.2
	Sum Aroclor-1254			1267338	1309378	941.5	1393.2
	Average Aroclor-1254					235.364	348.305
17)	L7 Aroclor-1260	14.31	14.91f	320827	251540	158.0	214.2m #
18)	L7 Aroclor-1260 {2}	14.81	0.00	539392	0	195.2	N.D. d #
19)	L7 Aroclor-1260 {3}	15.25	14.92	549642	246084	215.5	111.2 #
20)	L7 Aroclor-1260 {4}	15.72	16.08	152280	119180	122.9	93.2
21)	L7 Aroclor-1260 {5}	0.00	16.32	0	328386	N.D. d	108.2 #
	Sum Aroclor-1260			1562140	945190	425.5	324.1
A	Average Aroclor-1260					172.893	131.694

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060757.D XPCBE30.M Sat Jun 09 12:24:39 2001

Page 1

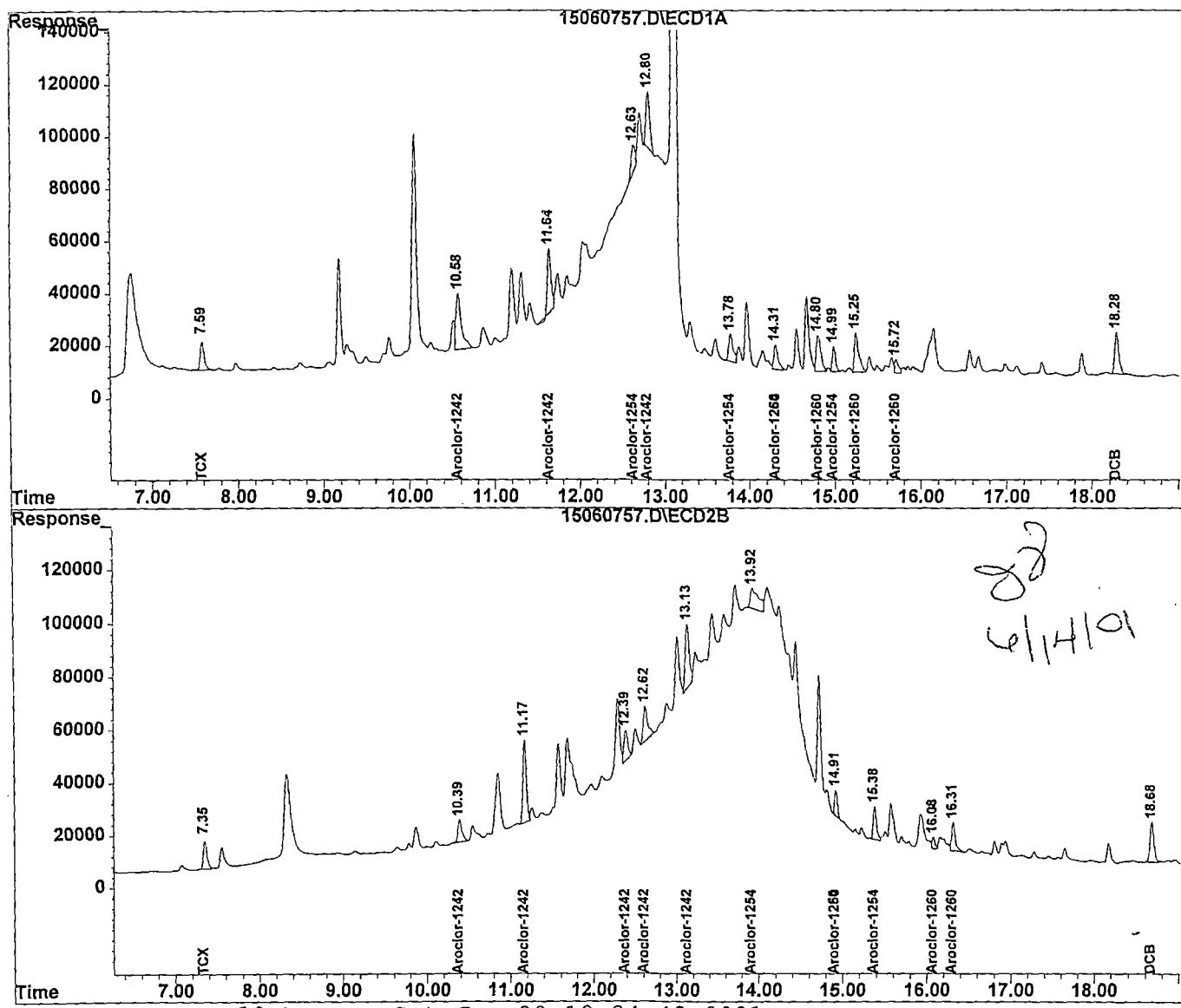
Chromatographic Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060757.D\ECD1A.CH Vial: 38
 Acq On : 09 Jun 2001 5:48 Operator: DDC
 Sample : 46676.16 *E30H3 * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*46 Dilution: 1.00
 IntFile : events.e

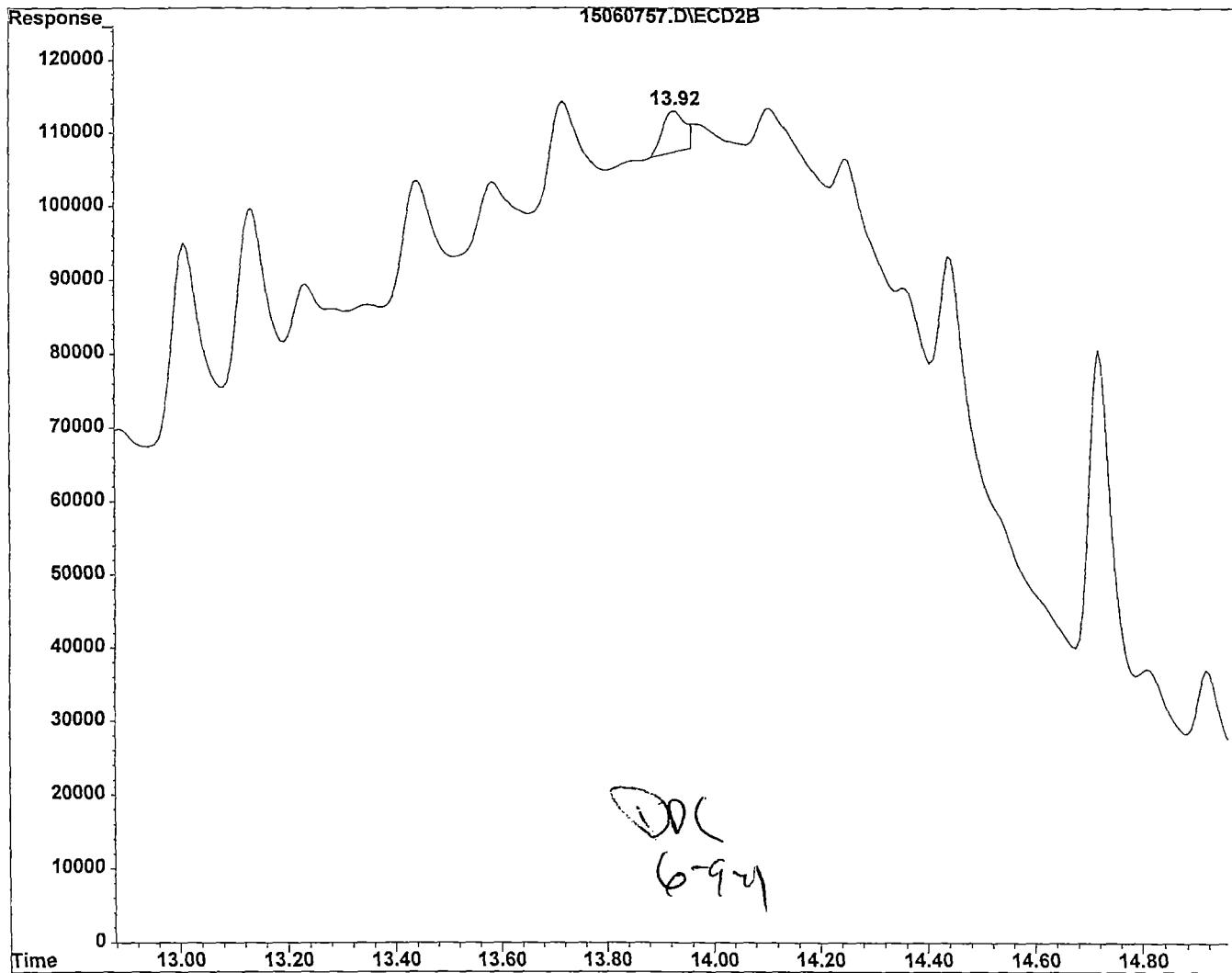
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 Acq On : 09 Jun 2001 5:48 Operator: DDC
 Sample : 46676.16 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e
 Quant Time: Jun 9 12:24 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



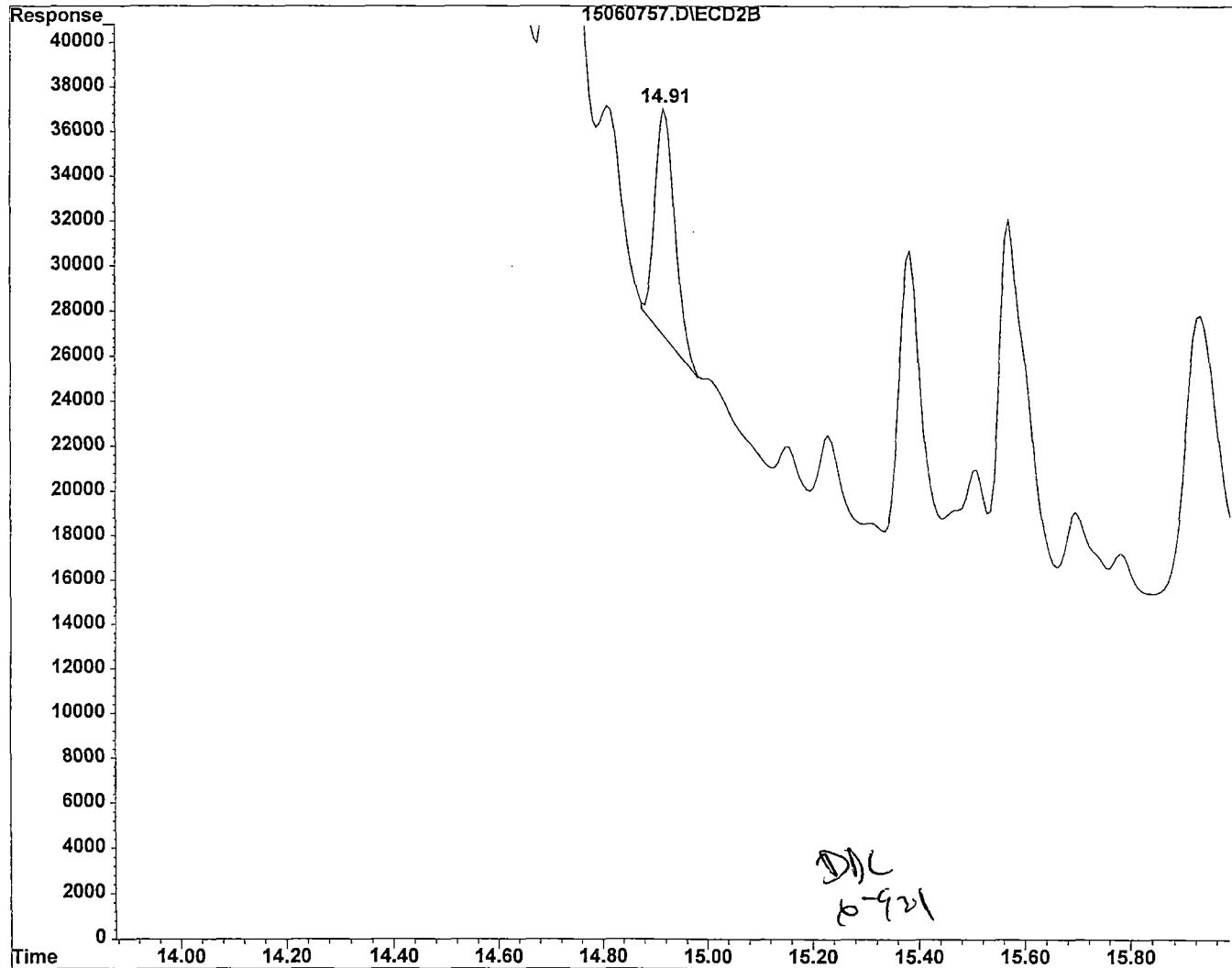
MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\15\DATA\06_07_01\15060757.D
Date Acquired: 09 Jun 2001 5:48
Inst: HP_15 Operator ID: DDC
Name: 46676.16
Misc:
Method: F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
Title: PCB/TOXAPHENE
Quant Time: Jun 9 12:24 2001 Quant Results File: XPCBE30.RES



Aroclor-1254 #2 13.92min area: 168340 m

Integration Time Range: 13.88 - 13.95

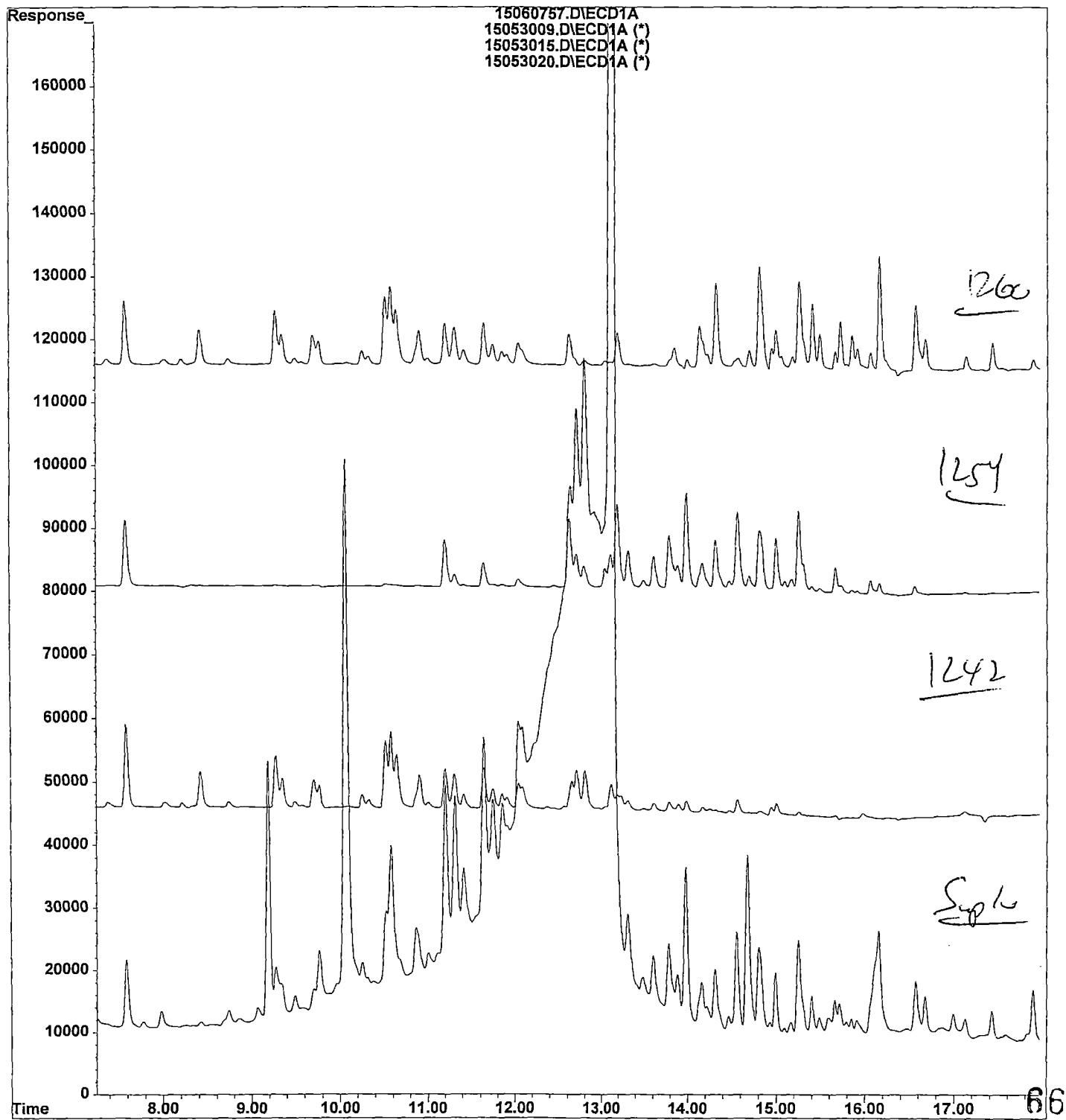
MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\15\DATA\06_07_01\15060757.D
Date Acquired: 09 Jun 2001 5:48
Inst: HP_15 Operator ID: DDC
Name: 46676.16
Misc:
Method: F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
Title: PCB/TOXAPHENE
Quant Time: Jun 9 12:24 2001 Quant Results File: XPCBE30.RES



Aroclor-1260 #2 14.91min area: 251540 m

Integration Time Range: 14.87 - 14.98

File : F:\HPCHEM\HP\15\DATA\06_07_01\15060757.D
Operator : DDC
Acquired : 09 Jun 2001 5:48 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46676.16
Misc Info :
Vial Number: 38



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H3DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.16DL

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 46 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/09/01

Injection Volume: 0.5(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2-----	Aroclor-1016	120	U	
11104-28-2-----	Aroclor-1221	120	U	
11141-16-5-----	Aroclor-1232	120	U	
53469-21-9-----	Aroclor-1242	1000	D	
12672-29-6-----	Aroclor-1248	120	U	
11097-69-1-----	Aroclor-1254	280	D	
11096-82-5-----	Aroclor-1260	180	D	
Surrogate amount spiked		12.30		

*Billie
Matthew
2/13/01*

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060913.D\ECD1A.CH Vial: 13
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060913.D\ECD2B.CH
 Acq On : 09 Jun 2001 20:49 Operator: DDC
 Sample : 46676.16DL *E30H3DL * Inst : HP_15
 Misc : *EPA*30.1G/5.0ML*46 Dilution: 2.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 10 10:17 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.60	7.35	245291	176594	14.6	10.9	#
	Spiked Amount	12.305			Recovery	=	118.65%	88.58%
22)	S DCB	18.29	18.68	294435	278782	18.1	16.9	
	Spiked Amount	12.305			Recovery	=	147.10%	137.35%

Target Compounds:

9)	L4 Aroclor-1242 {3}	10.58f	12.40	752066	258599	1156.4	996.3	
10)	L4 Aroclor-1242 {4}	11.65	12.63	520345	309822	1201.3	1192.5	
11)	L4 Aroclor-1242 {5}	12.81	13.14	753329	386567	1436.5	974.9	#
	Sum Aroclor-1242			2025740	954988	3794.2	3163.7	
	Average Aroclor-1242					1264.745	1054.550	
13)	L6 Aroclor-1254 {2}	13.32	0.00	133410	0	292.9	N.D. d	#
14)	L6 Aroclor-1254 {3}	13.79	13.93	214729	141418	292.4	343.6	
15)	L6 Aroclor-1254 {4}	14.32	14.92	191007	150292	335.1	259.8	
16)	L6 Aroclor-1254 {5}	14.99	15.38	146039	195538	255.3	241.4	
	Sum Aroclor-1254			685185	487248	1175.7	844.8	
	Average Aroclor-1254					293.930	281.589	
17)	L7 Aroclor-1260	14.32	0.00	191007	0	188.1	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.81	14.72	314026	707460	227.3	732.1	#
19)	L7 Aroclor-1260 {3}	15.25	14.92	310627	150292	243.5	135.8	#
20)	L7 Aroclor-1260 {4}	15.72	16.09	79560	56195	128.4	87.9	#
21)	L7 Aroclor-1260 {5}	16.16	16.32	179810	170791	137.6	112.5	
	Sum Aroclor-1260			1075030	1084739	1138.1	1314.5	
	Average Aroclor-1260					184.993	267.065	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060913.D XPCBE30.M Sun Jun 10 10:27:17 2001

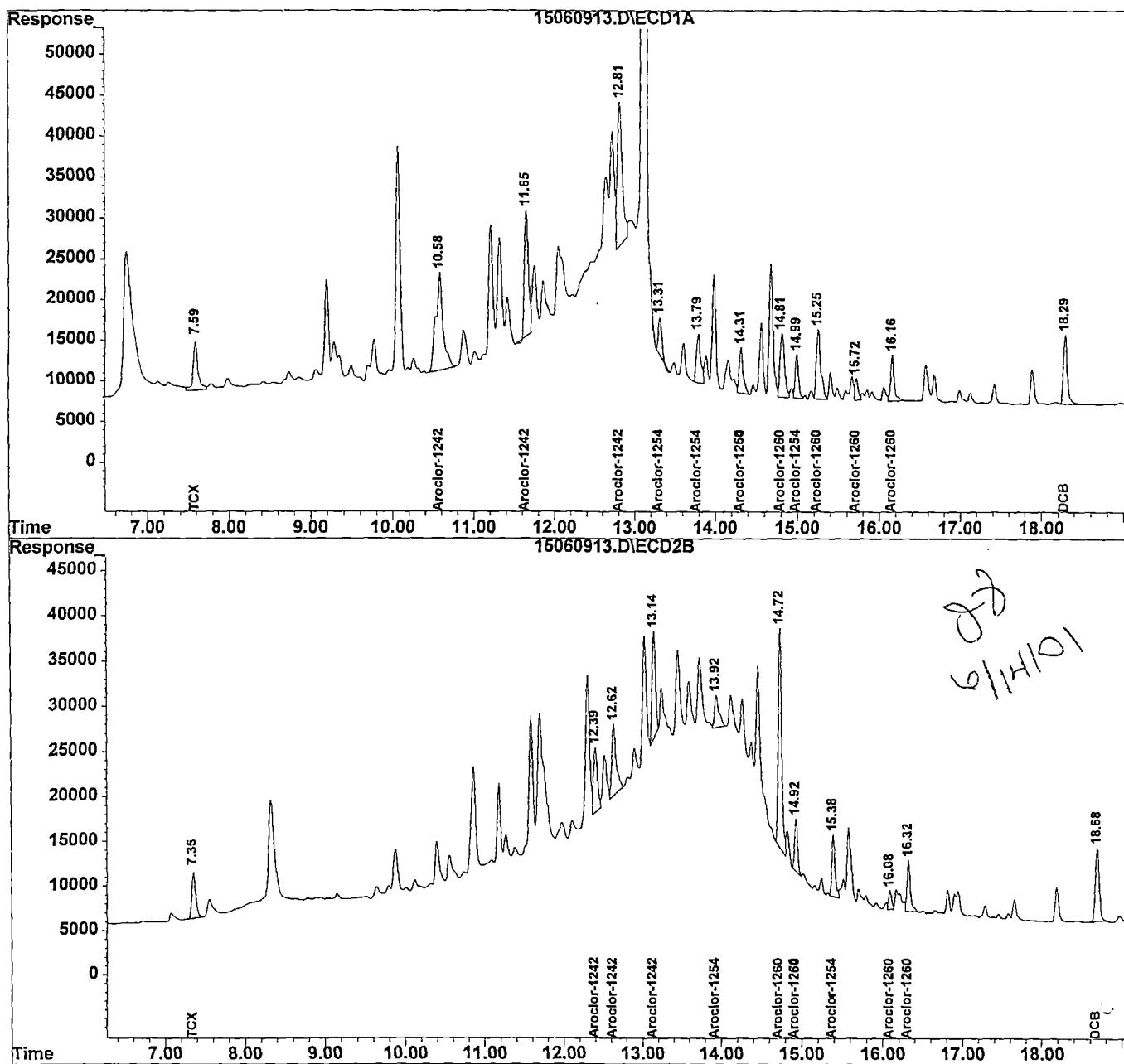
Page 1

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060913.D\ECD1A.CH Vial: 13
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060913.D\ECD2B.CH
 Acq On : 09 Jun 2001 20:49 Operator: DDC
 Sample : 46676.16DL *E30H3DL * Inst : HP 15
 Misc : *EPA*30.1G/5.0ML*46 Dilution: 2.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 10 10:17 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj.	: 0.5uL		
Signal #1 Phase	: DB-17MS	Signal #2 Phase:	DB-XLB
Signal #1 Info	: .32 mm	Signal #2 Info	: .32 mm
Signal #1 Inst	: HP_15A	Signal #2 Inst	: HP_15B



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H4

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.17

Sample wt/vol: 30.4 (g/mL) G Lab File ID: _____

% Moisture: 41 decanted: (Y/N) ___ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/09/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2-----	Aroclor-1016	55	U	
11104-28-2-----	Aroclor-1221	55	U	
11141-16-5-----	Aroclor-1232	55	U	
53469-21-9-----	Aroclor-1242	2400	E15	7300 DJ
12672-29-6-----	Aroclor-1248	55	U	
11097-69-1-----	Aroclor-1254	2900	E15	6500 DP
11096-82-5-----	Aroclor-1260	1200	E15	4000 DJ
Surrogate amount spiked		11.16		

*Harell
7/12/01*

70

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060758.D\ECD1A.CH Vial: 39
 Acq On : 09 Jun 2001 6:11 Operator: DDC
 Sample : 46676.17 *E30H4 * Inst : HP_15
 Misc : *EPA*30.4G/5.0ML*41 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060758.D\ECD2B.CH Vial: 39
 Acq On : 09 Jun 2001 6:11 Operator: DDC
 Sample : 46676.17 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 12:29 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S TCX	7.59	7.35	348689	378171	9.403	10.6
Spiked Amount	11.151			Recovery	=	84.33% 95.06%
22) S DCB	18.28	18.65f	580956	5074962	16.1m	139.7 E#
Spiked Amount	11.151			Recovery	=	144.38% 1252.83%

Target Compounds:

7) L4 Aroclor-1242	0.00	10.39	0	612404	N.D. d	1373.8 E#
8) L4 Aroclor-1242 {2}	9.76f	0.00	691514	0	1087.7 E	N.D. d #
9) L4 Aroclor-1242 {3}	10.58f	12.39	3241004	2148956	2258.2 E	3751.2 E#
10) L4 Aroclor-1242 {4}	11.64	12.62	3555625	2774284	3719.4 E	4838.2 E#
Sum Aroclor-1242			7488142	5535643	7065.3	9963.2
Average Aroclor-1242					2355.093	3321.079

13) L6 Aroclor-1254 {2}	13.31	0.00	3108065	0	3092.4 E	N.D. d #
14) L6 Aroclor-1254 {3}	13.78	13.92	4096810	1897204	2527.6 E	2088.4 E
15) L6 Aroclor-1254 {4}	14.31	14.92	4006424	3929607	3185.1 E	3078.3 E
16) L6 Aroclor-1254 {5}	14.99	15.38	4616103	6257086	3655.8 E	3499.8 E
Sum Aroclor-1254			15827403	12083897	12461.0	8666.5
Average Aroclor-1254					3115.258	2888.829

17) L7 Aroclor-1260	14.31	0.00	4006424	0	1788.2 E	N.D. d #
18) L7 Aroclor-1260 {2}	14.80	0.00	6531649	0	2142.4 E	N.D. d #
19) L7 Aroclor-1260 {3}	0.00	14.92	0	3929607	N.D. d	1608.5 E#
20) L7 Aroclor-1260 {4}	15.72	16.08	1645107	1002977	1203.0 E	711.1 #
21) L7 Aroclor-1260 {5}	16.16	16.31	3075922	3983450	1066.4 E	1189.1 E
Sum Aroclor-1260			15259101	8916034	3456.7	1956.2
Average Aroclor-1260					1549.967	1169.534

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060758.D XPCBE30.M Sat Jun 09 12:30:15 2001

Page 1

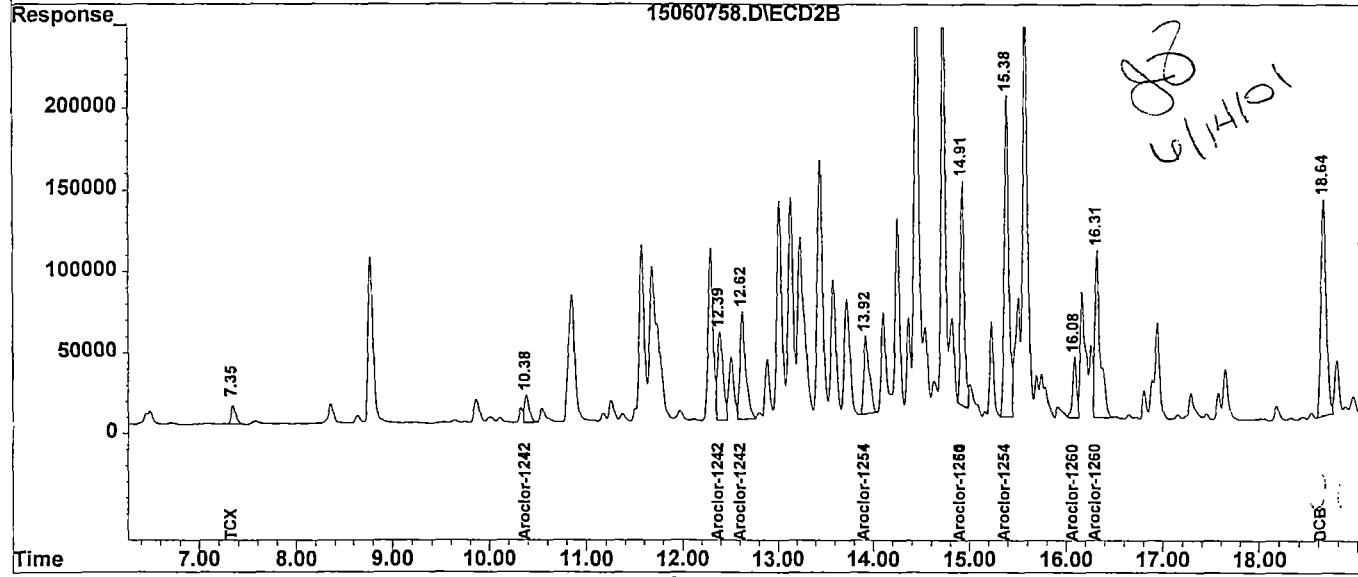
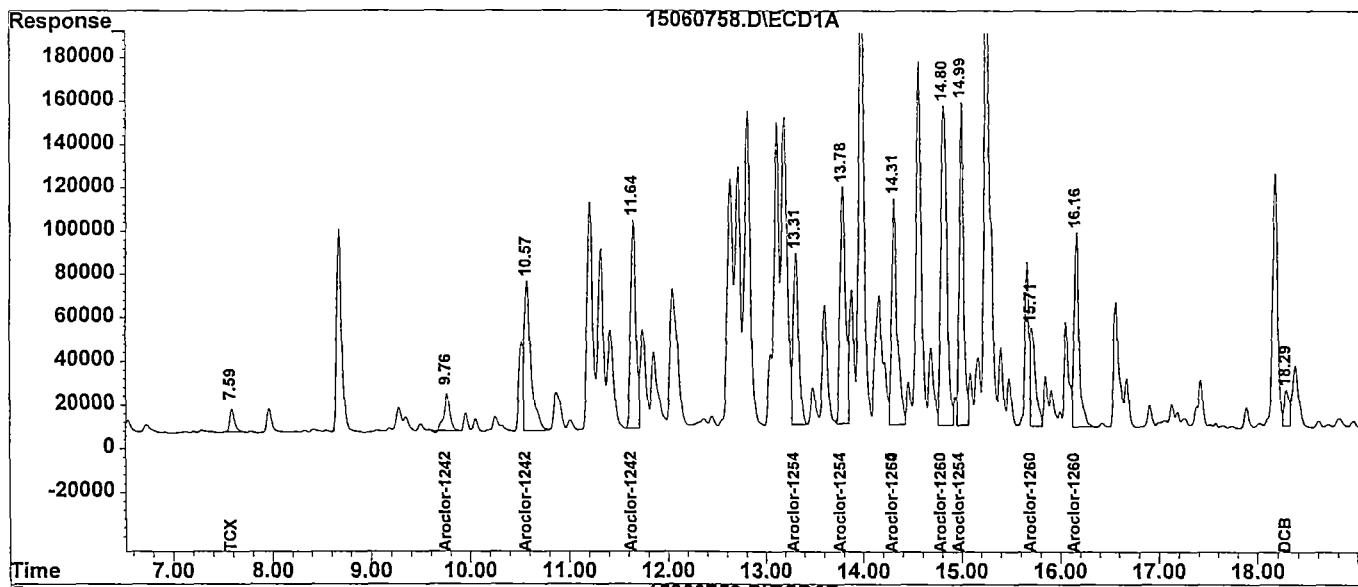
Chromatographic Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060758.D\ECD1A.CH Vial: 39
 Acq On : 09 Jun 2001 6:11 Operator: DDC
 Sample : 46676.17 *E30H4 * Inst : HP_15
 Misc : *EPA*30.4G/5.0ML*41 Dilution: 1.00
 IntFile : events.e

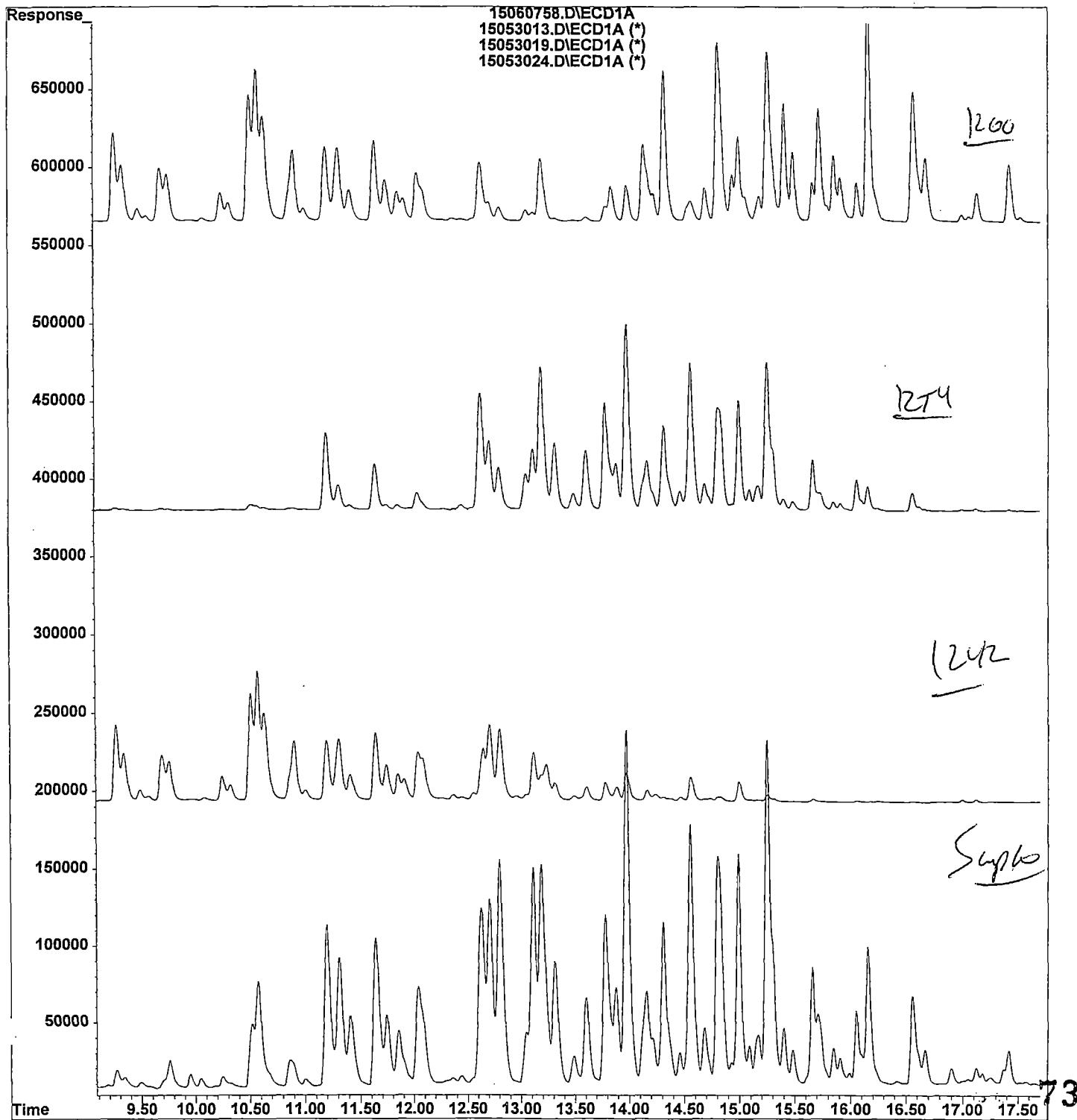
Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060758.D\ECD2B.CH Vial: 39
 Acq On : 09 Jun 2001 6:11 Operator: DDC
 Sample : 46676.17 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e
 Quant Time: Jun 9 12:29 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

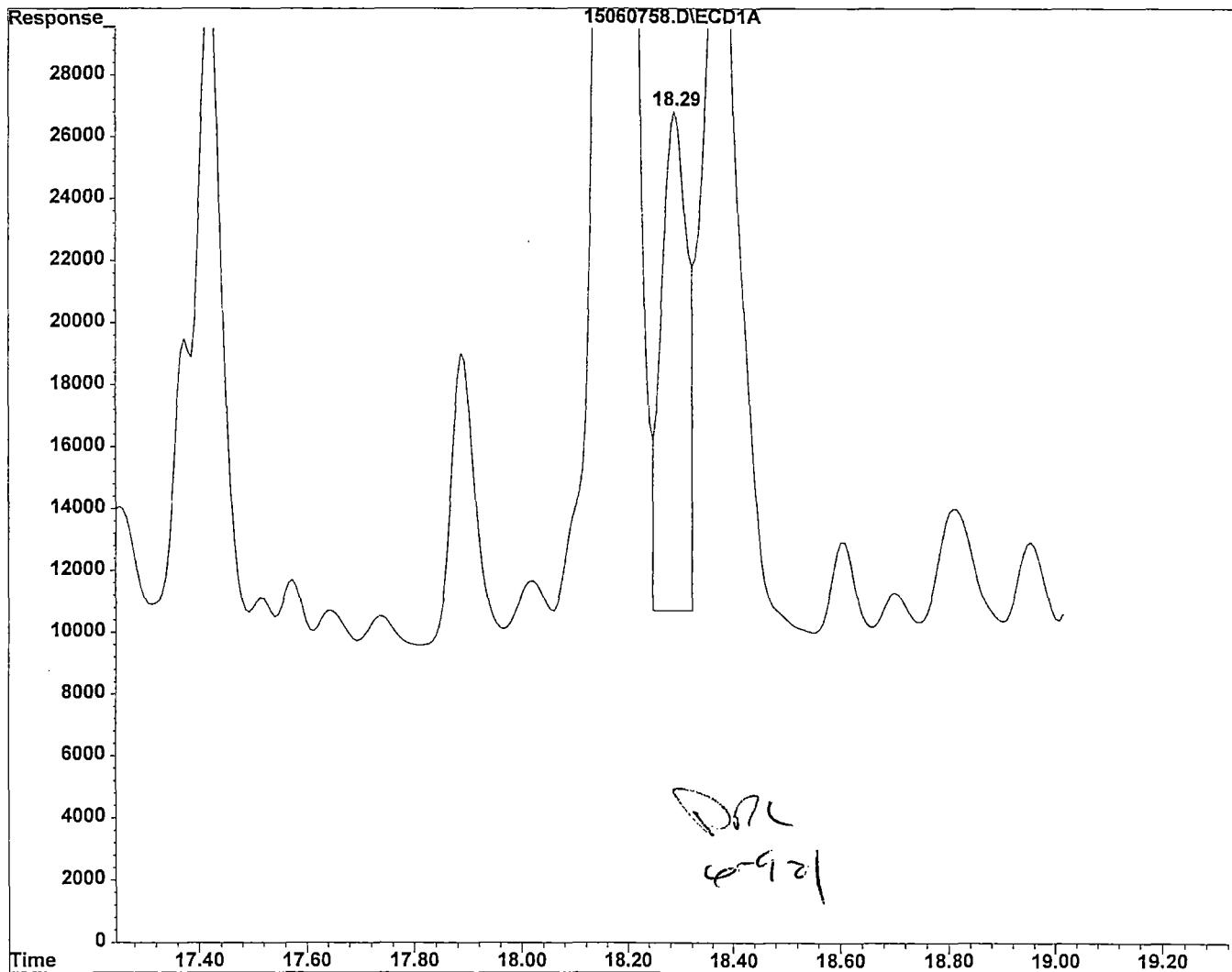
Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



File : F:\HPCHEM\HP\15\DATA\06_07_01\15060758.D
Operator : DDC
Acquired : 09 Jun 2001 6:11 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46676.17
Misc Info :
Vial Number: 39



MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\15\DATA\06_07_01\15060758.D
Date Acquired: 09 Jun 2001 6:11
Inst: HP_15 Operator ID: DDC
Name: 46676.17 *E30H4 *
Misc: *EPA*30.4G/5.0ML*41
Method: F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
Title: PCB/TOXAPHENE
Quant Time: Jun 9 12:29 2001 Quant Results File: XPCBE30.RES



DCB 18.29min area: 580956 m

Integration Time Range: 18.25 - 18.32

1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H4DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.17DL

Sample wt/vol: 30.4 (g/mL) G Lab File ID: _____

% Moisture: 41 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/13/01

Injection Volume: 0.5(uL) Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/KG	Q
12674-11-2-----	Aroclor-1016	5500	U	
11104-28-2-----	Aroclor-1221	5500	U	
11141-16-5-----	Aroclor-1232	5500	U	
53469-21-9-----	Aroclor-1242	7300	DP	
12672-29-6-----	Aroclor-1248	5500	U	
11097-69-1-----	Aroclor-1254	6500	DP	
11096-82-5-----	Aroclor-1260	4000	DJP	
Surrogate amount spiked		11.16		

W. Gillett
Mother
7/13/01

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_12_01\15061242.D\ECD1A.CH Vial: 42
 Acq On : 13 Jun 2001 4:18 Operator: DDC
 Sample : 46676.17DL *E30H4DL * Inst : HP_15
 Misc : *EPA*30.4G/5.0ML*41 Dilution: 100.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_12_01\15061242.D\ECD2B.CH Vial: 42
 Acq On : 13 Jun 2001 4:18 Operator: DDC
 Sample : 46676.17DL Inst : HP_15
 Misc : Dilution: 100.00
 IntFile : events2.e

Quant Time: Jun 13 10:51 2001 Quant Results File: XPCBF12.RES

Method : F:\HPCHEM\HP\15\DATA\06_12_01\XPCBF12.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_12_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S	TCX	7.59	7.35	7197	7116	17.4	22.7	#
	Spiked Amount	11.151			Recovery	= 156.04%	203.57%	
22) S	DCB	18.22f	18.66f	88006	23184	356.6m ^{DCB}	126.3	#
	Spiked Amount	11.151			Recovery	= 3197.99% ^{b-HCl}	1132.66%	

Target Compounds:

7)	L4 Aroclor-1242	0.00	10.39	0	9344	N.D.	2801.9	#
8)	L4 Aroclor-1242 {2}	9.77f	0.00	5362	0	903.0	N.D. d	#
9)	L4 Aroclor-1242 {3}	0.00	12.39	0	47244	N.D.	13809.1	#
10)	L4 Aroclor-1242 {4}	11.66	0.00	86433	0	10364.6	N.D. d	#
11)	L4 Aroclor-1242 {5}	12.84	13.18	147102	66380	10775.4	17176.5	#
	Sum Aroclor-1242			238897	122968	22043.0	33787.6	
	Average Aroclor-1242					7347.661	11262.534	

12)	L6 Aroclor-1254	12.66	12.31	129766	76524	6237.7	17129.8	#
13)	L6 Aroclor-1254 {2}	13.34	13.05	89170	98291	6760.4	20059.1	#
14)	L6 Aroclor-1254 {3}	13.82	13.94	92847	49749	6606.7	8115.8	
15)	L6 Aroclor-1254 {4}	14.33	14.94	119691	87550	8278.6	8459.0	
16)	L6 Aroclor-1254 {5}	15.01	15.40	42523	87609	4600.6	10368.4	#
	Sum Aroclor-1254			473996	399723	32484.1	64132.1	
	Average Aroclor-1254					6496.818	12826.423	

17)	L7 Aroclor-1260	14.33	0.00	119691	0	4238.3	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.83	14.74	161862	131505	5728.8	5588.9	
19)	L7 Aroclor-1260 {3}	15.27	14.94	151892	87550	5846.7	4047.7	#
20)	L7 Aroclor-1260 {4}	0.00	16.09	0	52626	N.D.	4249.8	#
21)	L7 Aroclor-1260 {5}	16.17	16.33	363824	57028	12517.7	2324.8	#
	Sum Aroclor-1260			797269	328709	1579587.9	903838.7	
	Average Aroclor-1260					7082.872	4052.813	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int. 76

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15061242.D XPCBF12.M Wed Jun 13 10:52:06 2001

Page 1

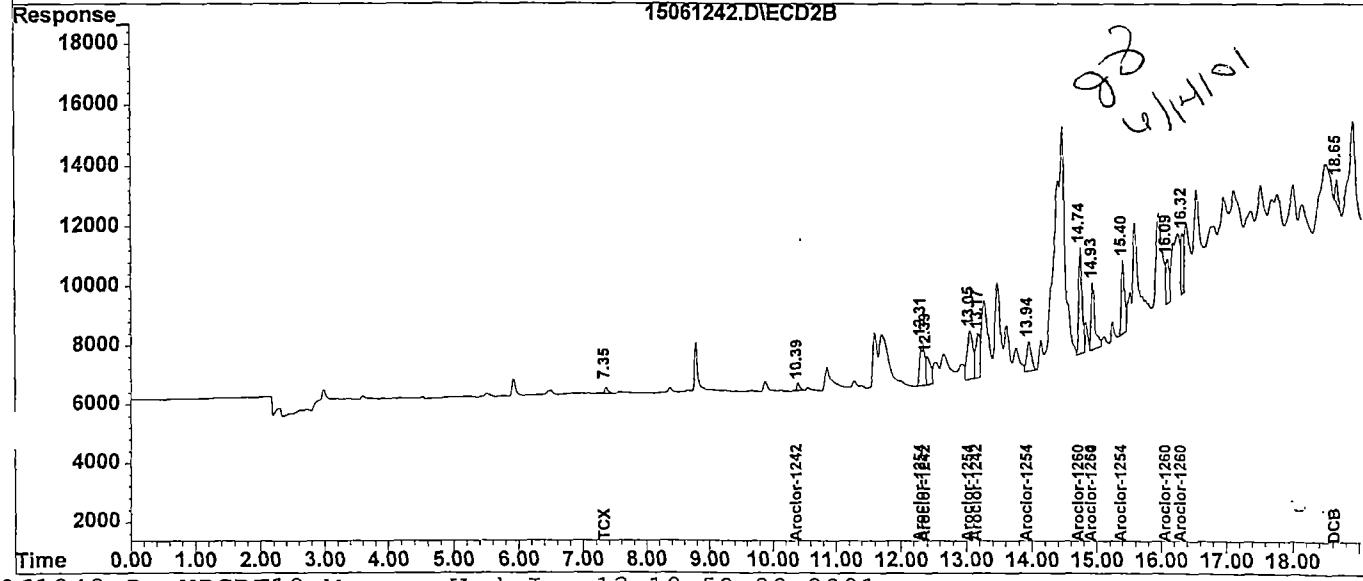
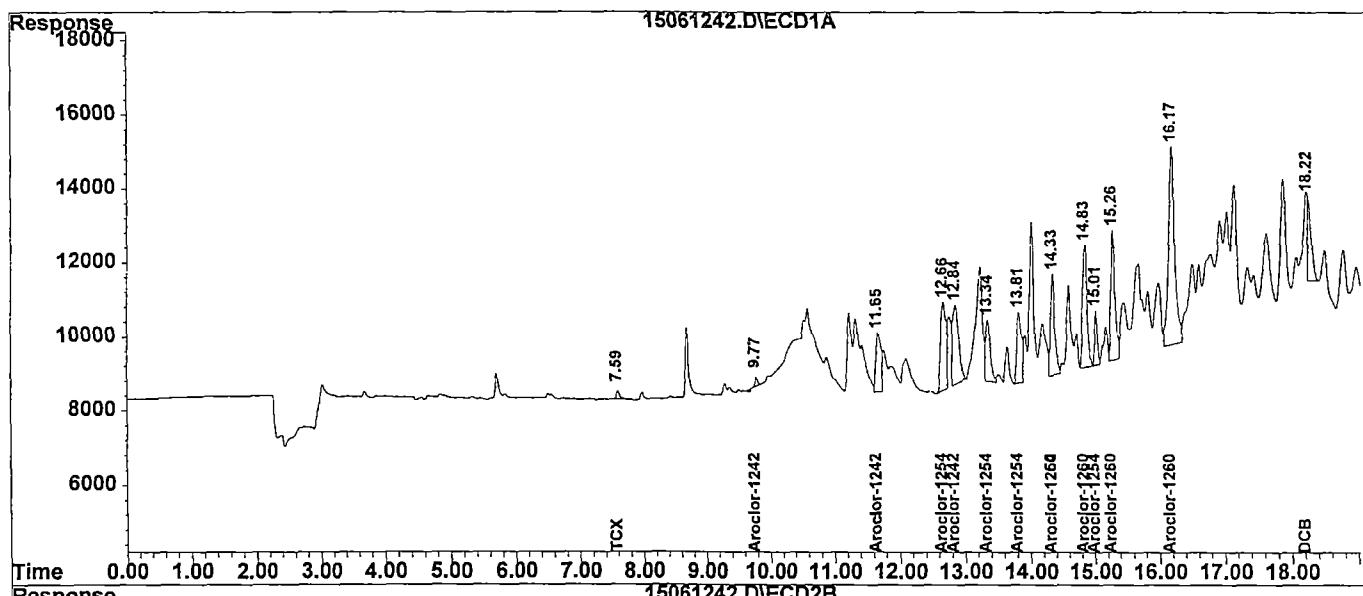
Chromatographic Report

Data File : F:\HPCHEM\HP\15\DATA\06_12_01\15061242.D\ECD1A.CH Vial: 42
 Acq On : 13 Jun 2001 4:18 Operator: DDC
 Sample : 46676.17DL *E30H4DL * Inst : HP_15
 Misc : *EPA*30.4G/5.0ML*41 Dilution: 100.00
 IntFile : events.e

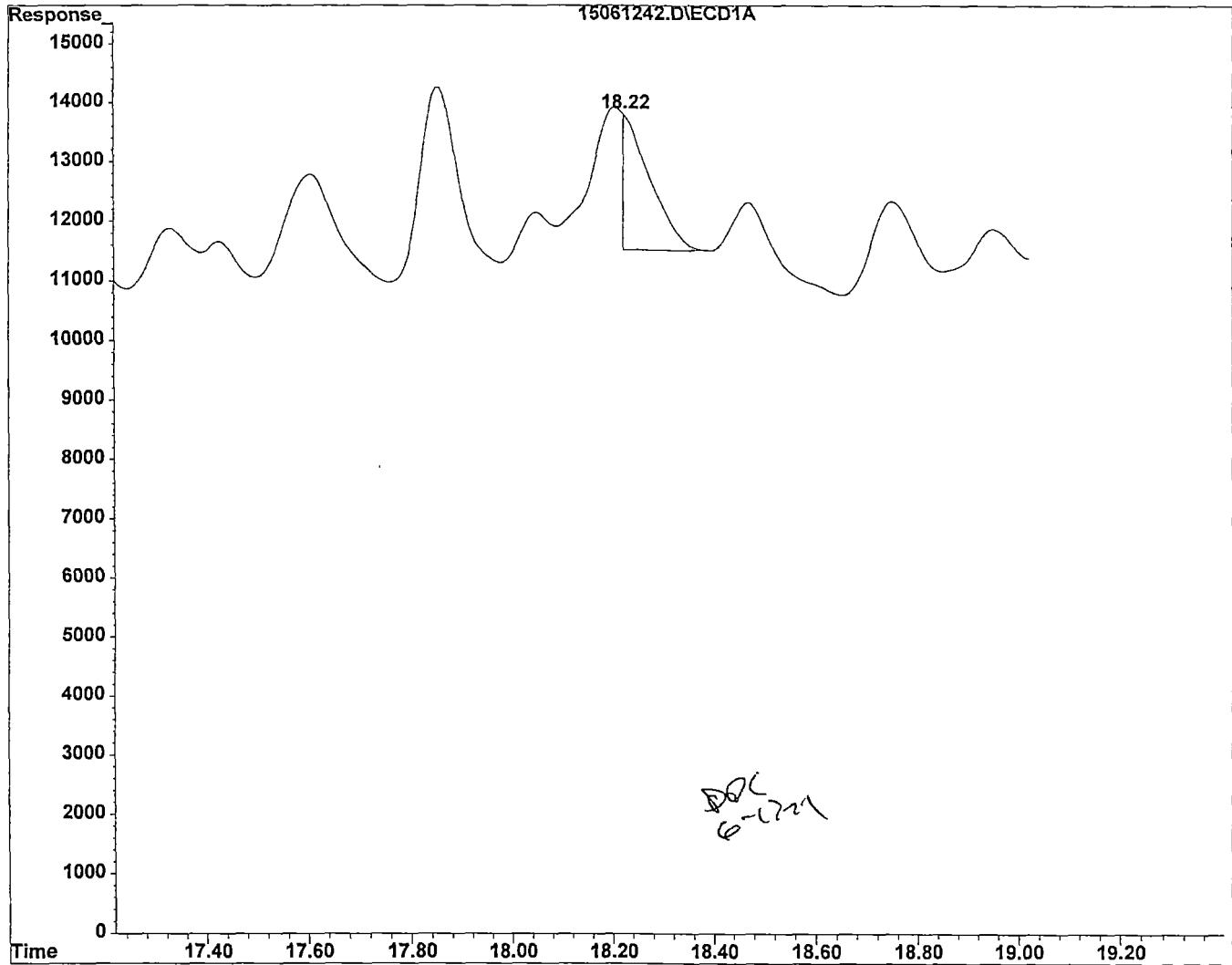
Data File : F:\HPCHEM\HP\15\DATA\06_12_01\15061242.D\ECD2B.CH Vial: 42
 Acq On : 13 Jun 2001 4:18 Operator: DDC
 Sample : 46676.17DL Inst : HP_15
 Misc : Dilution: 100.00
 IntFile : events2.e
 Quant Time: Jun 13 10:51 2001 Quant Results File: XPCBF12.RES

Method : F:\HPCHEM\HP\15\DATA\06_12_01\XPCBF12.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\06_12_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\15\DATA\06_12_01\15061242.D
Date Acquired: 13 Jun 2001 4:18
Inst: HP_15 Operator ID: DDC
Name: 46676.17DL
Misc:
Method: F:\HPCHEM\HP\15\DATA\06_12_01\XPCBF12.M
Title: PCB/TOXAPHENE
Quant Time: Jun 13 10:51 2001 Quant Results File: XPCBF12.RES



DCB 18.22min area: 88006 m

Integration Time Range: 18.22 - 18.40

1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H5

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.18

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 46 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/KG	Q
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12674-11-2-----Aroclor-1016	60	U	
11104-28-2-----Aroclor-1221	60	U	
11141-16-5-----Aroclor-1232	60	U	
53469-21-9-----Aroclor-1242	22000	E	49000 D
12672-29-6-----Aroclor-1248	60	U	
11097-69-1-----Aroclor-1254	7000	E	18000 D
11096-82-5-----Aroclor-1260	3300	E	12000 D
Surrogate amount spiked	12.22		

*Leave Bl
7/16/01**TB
7/16/01*

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060765.D\ECD1A.CH Vial: 46
 Acq On : 09 Jun 2001 8:53 Operator: DDC
 Sample : 46676.18 *E30H5 * Inst : HP_15
 Misc : *EPA*30.3G/5.0ML*46 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060765.D\ECD2B.CH Vial: 46
 Acq On : 09 Jun 2001 8:53 Operator: DDC
 Sample : 46676.18 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 13:37 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.59	7.35	361191	377178	10.7	11.5	
	Spiked Amount	12.223		Recovery	=	87.54%	94.08%	
22)	S DCB		18.28	18.65f	415446	2877808	12.7	86.9 E#
	Spiked Amount	12.223		Recovery	=	103.90%	710.93%	

Target Compounds:

9)	L4 Aroclor-1242 {3}	10.58f	12.39	25153315	10981090	19211.4	E	21012.7	E
10)	L4 Aroclor-1242 {4}	11.64	12.62	16216552	16228528	18595.5	E	31024.5	E#
11)	L4 Aroclor-1242 {5}	12.80	13.13	29682953	27157824	28113.9	E	34020.5	E
	Sum Aroclor-1242			71052820	54367442	65920.8		86057.7	
	Average Aroclor-1242					21973.615		28685.915	

12)	L6 Aroclor-1254	12.64	0.00	12256596		0	7096.2	E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.31	0.00	7489936		0	8169.1	E	N.D. d #
14)	L6 Aroclor-1254 {3}	13.78	13.92	9587871	4470003	6484.5	E	5393.8	E
15)	L6 Aroclor-1254 {4}	14.31	14.92	7862362	8670790	6852.0	E	7445.8	E
16)	L6 Aroclor-1254 {5}	0.00	15.38		0 13437130	N.D. d	8238.9	E#	
	Sum Aroclor-1254			37196764	26577923	28601.9		21078.4	
	Average Aroclor-1254					7150.467		7026.138	

17)	L7 Aroclor-1260	14.31	0.00	7862362		0	3846.7	E	N.D. d #
18)	L7 Aroclor-1260 {2}	14.80	0.00	12013703		0	4319.5	E	N.D. d #
19)	L7 Aroclor-1260 {3}	15.25	14.92	15500634	8670790	6036.1	E	3890.6	E#
20)	L7 Aroclor-1260 {4}	15.72	16.08	4413863	3199302	3538.1	E	2486.4	E#
21)	L7 Aroclor-1260 {5}	16.16	16.31	8777782	10428236	3335.9	E	3412.3	E
	Sum Aroclor-1260			48568343	22298329	12881.3		5982.9	
	Average Aroclor-1260					4215.271		3263.068	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060765.D XPCBE30.M Sat Jun 09 13:37:35 2001

Page 1

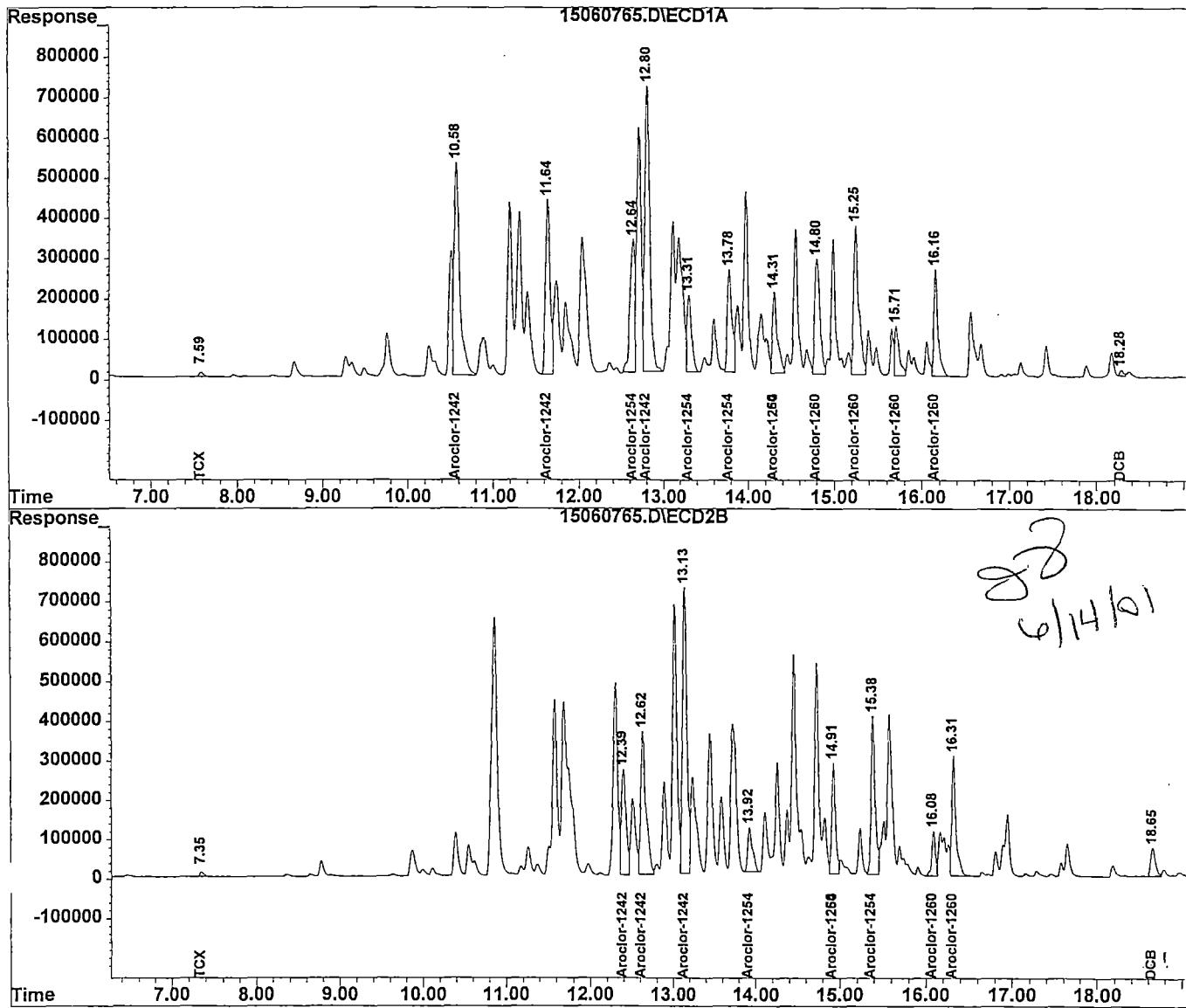
Chromatographic Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060765.D\ECD1A.CH Vial: 46
 Acq On : 09 Jun 2001 8:53 Operator: DDC
 Sample : 46676.18 *E30H5 * Inst : HP_15
 Misc : *EPA*30.3G/5.0ML*46 Dilution: 1.00
 IntFile : events.e

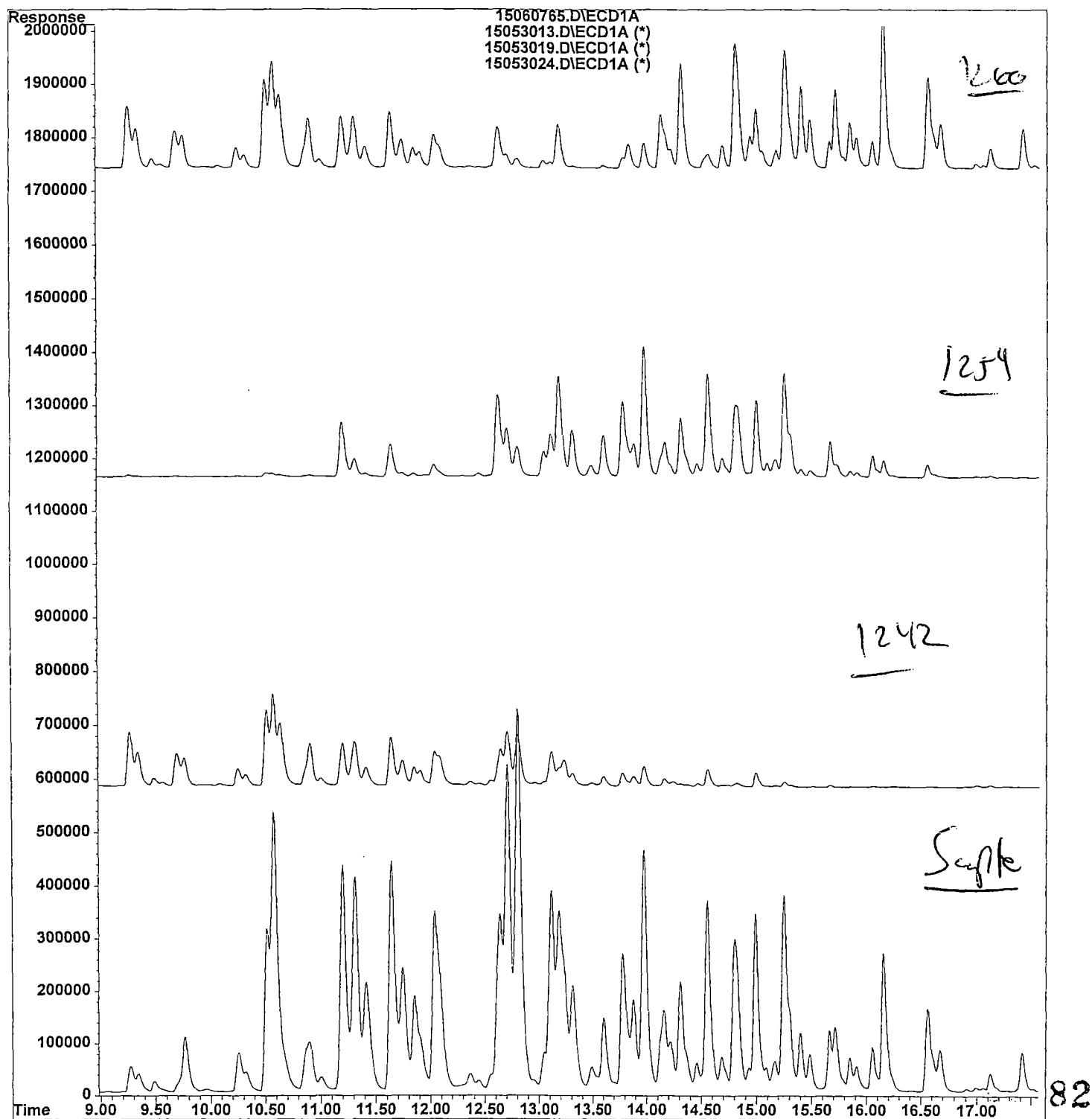
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 Acq On : 09 Jun 2001 8:53 Operator: DDC
 Sample : 46676.18 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e
 Quant Time: Jun 9 13:37 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE ~ F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



File : F:\HPCHEM\HP\15\DATA\06_07_01\15060765.D
Operator : DDC
Acquired : 09 Jun 2001 8:53 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46676.18
Misc Info :
Vial Number: 46



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H5DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.18DL

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 46 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/09/01

Injection Volume: 0.5(uL) Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q		
		6000	U	
12674-11-2-----	Aroclor-1016	6000	U	
11104-28-2-----	Aroclor-1221	6000	U	
11141-16-5-----	Aroclor-1232	6000	U	
53469-21-9-----	Aroclor-1242	49000	D	
12672-29-6-----	Aroclor-1248	6000	U	
11097-69-1-----	Aroclor-1254	18000	D	
11096-82-5-----	Aroclor-1260	12000	D	
Surrogate amount spiked		12.22		

*Z. Kowalewski
7/11/01*

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060915.D\ECD1A.CH Vial: 15
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060915.D\ECD2B.CH
 Acq On : 09 Jun 2001 21:36 Operator: DDC
 Sample : 46676.18DL *E30H5DL * Inst : HP_15
 Misc : *EPA*30.3G/5.0ML*46 Dilution: 100.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 14 16:06 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
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System Monitoring Compounds:

1) S TCX	7.59	7.35	7245	6708	21.4	20.5
Spiked Amount	12.223		Recovery	=	175.07%	167.71% ^{DPC}
22) S DCB	18.25f	18.65f	27580	43619	84.0m ^{b-44d}	131.7m ^{# 6-44d}
Spiked Amount	12.223		Recovery	=	687.20%	1077.44%

Target Compounds:

7) L4 Aroclor-1242	0.00	10.39	0	92324	N.D.	22702.7	#
8) L4 Aroclor-1242 {2}	9.77f	0.00	130766	0	22547.0	N.D. d	#
9) L4 Aroclor-1242 {3}	10.58f	12.39	952348	291490	72737.7	55777.7	
10) L4 Aroclor-1242 {4}	11.65	0.00	451853	0	51813.9	N.D. d	#
11) L4 Aroclor-1242 {5}	0.00	13.17	0	584922	N.D. d	73273.1	#
Sum Aroclor-1242			1534966	968737	147098.6	151753.4	
Average Aroclor-1242					49032.857	50584.480	

12) L6 Aroclor-1254	12.65	0.00	253084	0	14652.9	N.D. d	#
13) L6 Aroclor-1254 {2}	13.33	0.00	221369	0	24144.3	N.D. d	#
14) L6 Aroclor-1254 {3}	13.80	13.94	231878	189900	15682.6	22914.6	#
15) L6 Aroclor-1254 {4}	14.32	14.93	244873	273365	21340.4	23474.4	
16) L6 Aroclor-1254 {5}	15.01	15.39	182555	280670	15848.7	17209.0	
Sum Aroclor-1254			1133759	743935	91668.8	63598.0	
Average Aroclor-1254					18333.760	21199.318	

17) L7 Aroclor-1260	14.32	0.00	244873	0	11980.6	N.D. d	#
18) L7 Aroclor-1260 {2}	14.82	14.73	322743	410625	11604.2	21104.8	#
19) L7 Aroclor-1260 {3}	15.26	14.93	323769	273365	12608.0	12266.0	
20) L7 Aroclor-1260 {4}	15.72	16.09	102674	93483	8230.2	7265.1	
21) L7 Aroclor-1260 {5}	16.16	16.32	360881	258076	13714.8	8444.6	#
Sum Aroclor-1260			1354940	1035549	3553217.4	2999655.4	
Average Aroclor-1260					11627.549	12270.090	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
 (E)=> Highest cal. std. (d)=compound deleted (H) Dil. < med. std

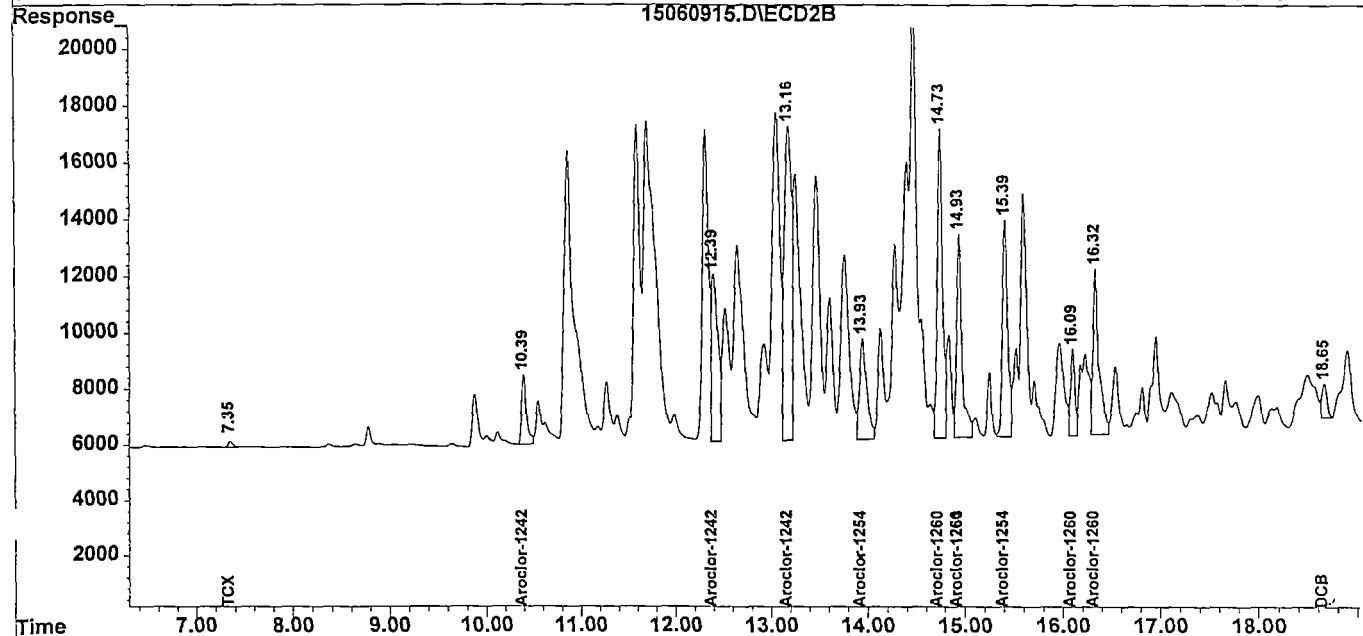
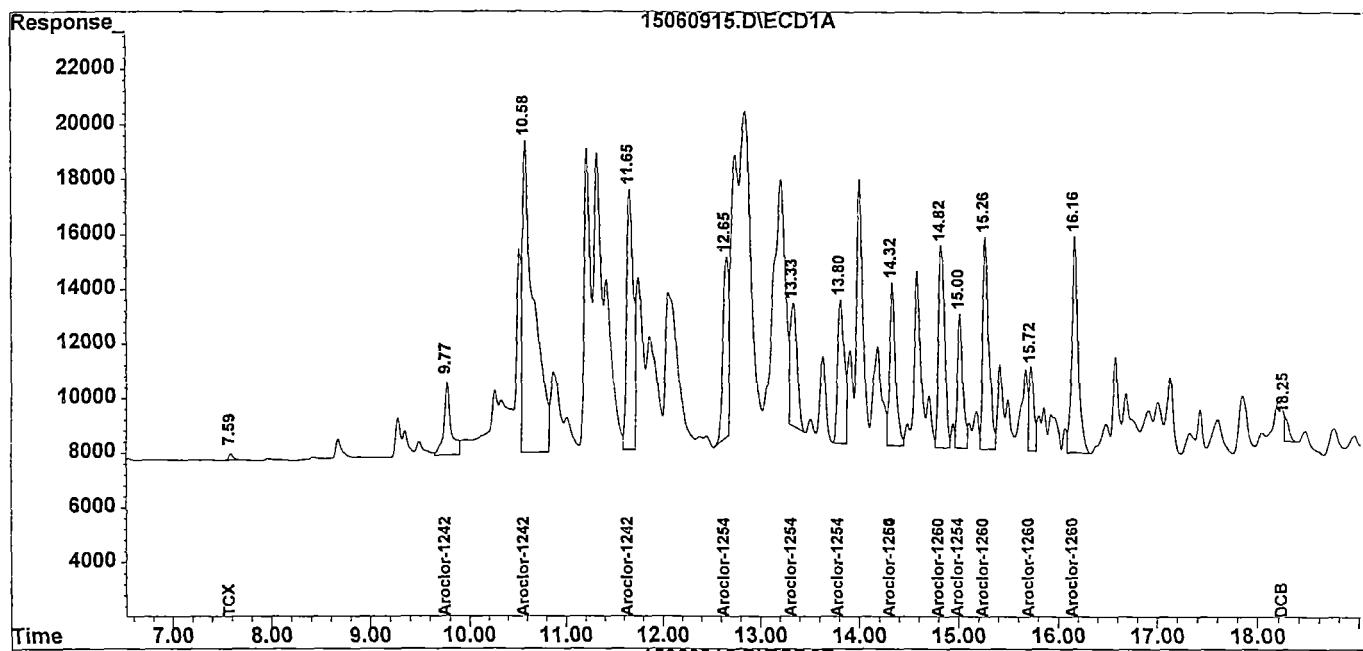
15060915.D XPCBE30.M Thu Jun 14 16:07:33 2001

Chromatographic Report

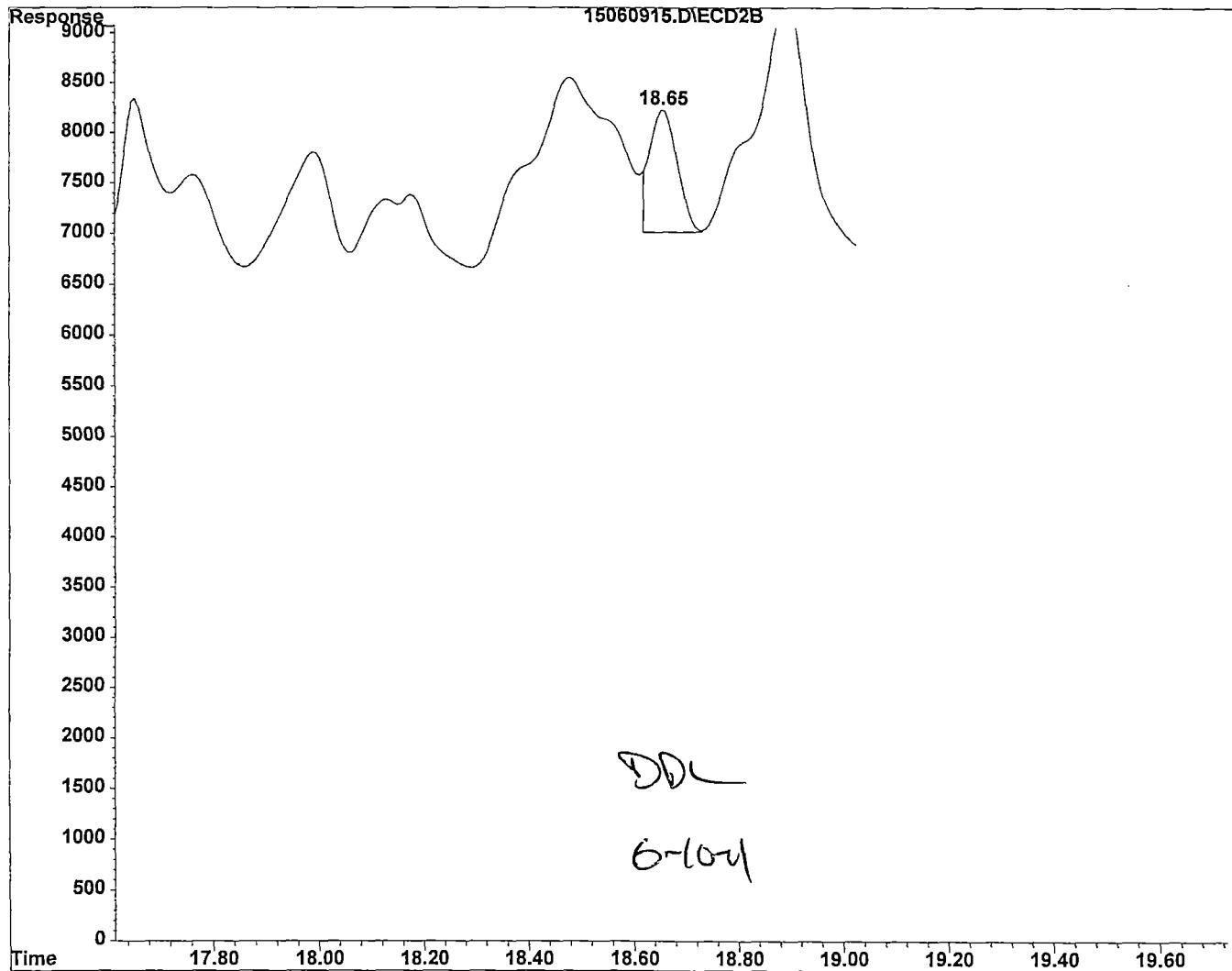
Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060915.D\ECD1A.CH Vial: 15
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060915.D\ECD2B.CH
 Acq On : 09 Jun 2001 21:36 Operator: DDC
 Sample : 46676.18DL *E30H5DL * Inst : HP_15
 Misc : *EPA*30.3G/5.0ML*46 Dilution: 100.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 14 16:06 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



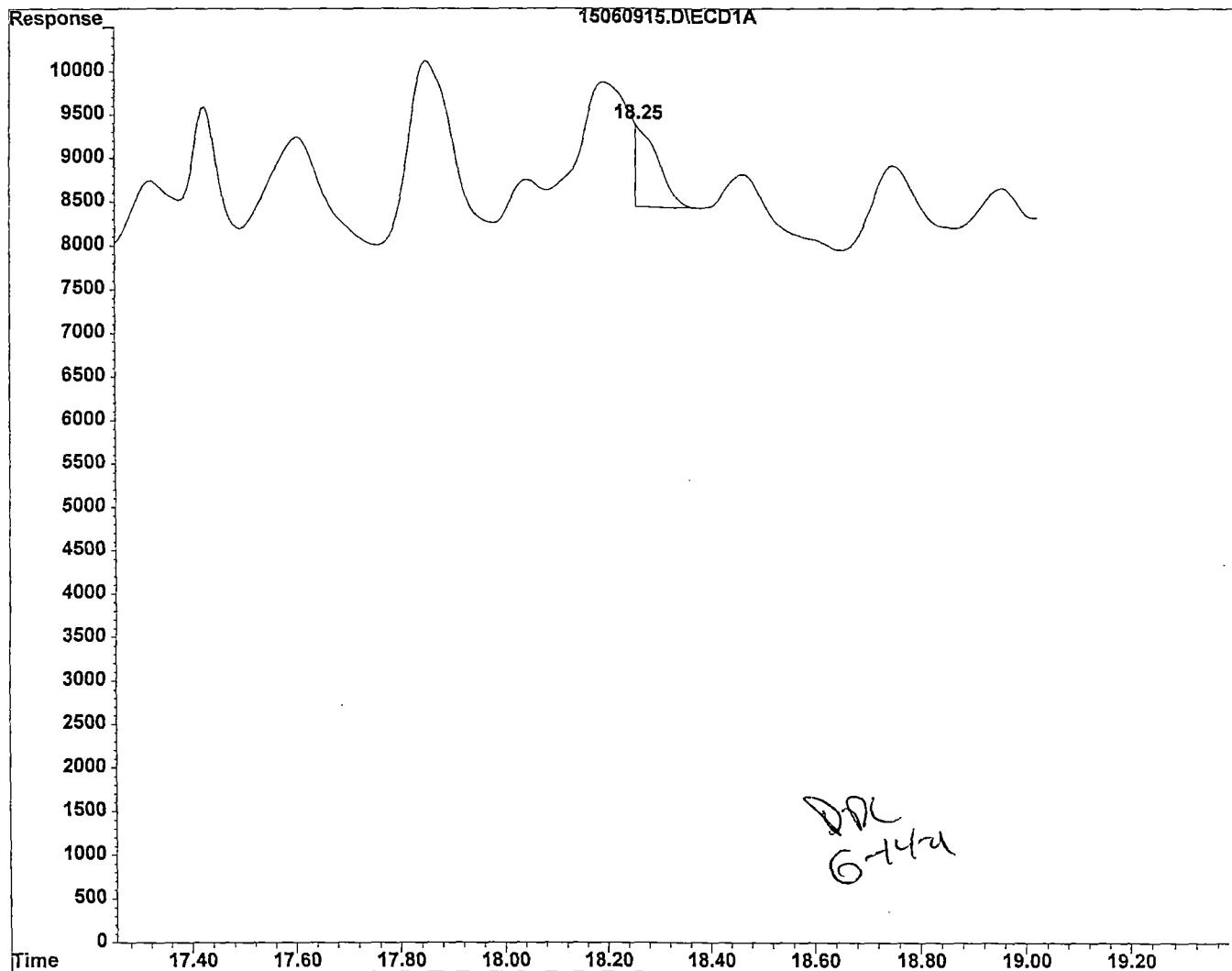
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Data File: F:\HPCHEM\HP\15\DATA\06_09_01\15060915.D
Date Acquired: 09 Jun 2001 21:36
Inst: HP_15 Operator ID: DDC
Name: 46676.18DL
Misc:
Method: F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
Title: PCB/TOXAPHENE
Quant Time: Jun 10 10:20 2001 Quant Results File: XPCBE30.RES



DCB #2 18.65min area: 43619 m

Integration Time Range: 18.62 - 18.73

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\15\DATA\06_09_01\15060915.D
Date Acquired: 09 Jun 2001 21:36
Inst: HP_15 Operator ID: DDC
Name: 46676.18DL *E30H5DL *
Misc: *EPA*30.3G/5.0ML*46
Method: F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 16:06 2001 Quant Results File: XPCBE30.RES



DCB 18.25min area: 27580 m

Integration Time Range: 18.25 - 18.38

1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H6

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.19

Sample wt/vol: 30.6 (g/mL) G Lab File ID: _____

% Moisture: 45 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
12674-11-2-----	Aroclor-1016	59	U
11104-28-2-----	Aroclor-1221	59	U
11141-16-5-----	Aroclor-1232	59	U
53469-21-9-----	Aroclor-1242	7200	13000 D
12672-29-6-----	Aroclor-1248	59	U
11097-69-1-----	Aroclor-1254	4600	8200 D
11096-82-5-----	Aroclor-1260	1900	3200 D
Surrogate amount spiked		11.89	

TB
7/16/01J. Knobel
7/16/01

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060766.D\ECD1A.CH Vial: 47
 Acq On : 09 Jun 2001 9:16 Operator: DDC
 Sample : 46676.19 *E30H6 * Inst : HP_15
 Misc : *EPA*30.6G/5.0ML*45 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060766.D\ECD2B.CH Vial: 47
 Acq On : 09 Jun 2001 9:16 Operator: DDC
 Sample : 46676.19 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e
 Quant Time: Jun 9 13:35 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
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System Monitoring Compounds:

1)	S TCX	7.59	7.35	347121	360183	9.976	10.7
	Spiked Amount	11.884			Recovery	=	83.95%
22)	S DCB		18.28	18.65f	341431	1517523	10.1
	Spiked Amount	11.884			Recovery	=	84.99%
							374.47%

Target Compounds:

9)	L4 Aroclor-1242 {3}	10.58f	12.39	7388444	3663602	5486.2 E	6815.5 E
10)	L4 Aroclor-1242 {4}	11.64	12.62	5804606	5516757	6471.0 E	10253.3 E#
11)	L4 Aroclor-1242 {5}	12.81	13.14	10368920	8544240	9547.7 E	10405.7 E
	Sum Aroclor-1242			23561970	17724600	21504.9	27474.5
	Average Aroclor-1242					7168.316	9158.154

12)	L6 Aroclor-1254	12.63	0.00	6654343	0	3745.5 E	N.D. d #
13)	L6 Aroclor-1254 {2}	13.31	0.00	4880837	0	5175.4 E	N.D. d #
14)	L6 Aroclor-1254 {3}	13.78	13.92	6354197	2691451	4178.0 E	3157.4 E
15)	L6 Aroclor-1254 {4}	14.31	14.92	5575849	6915287	4724.2 E	5773.2 E
16)	L6 Aroclor-1254 {5}	14.99	15.38	6675139	8393925	5633.9 E	5003.5 E
	Sum Aroclor-1254			30140365	18000662	23457.1	13934.1
	Average Aroclor-1254					4691.416	4644.688

17)	L7 Aroclor-1260	14.31	0.00	5575849	0	2652.2 E	N.D. d #
18)	L7 Aroclor-1260 {2}	14.81	0.00	8781991	0	3069.7 E	N.D. d #
19)	L7 Aroclor-1260 {3}	0.00	14.92	0	6915287	N.D. d	3016.6 E#
20)	L7 Aroclor-1260 {4}	15.72	16.08	2380262	1503518	1854.9 E	1136.0 E#
21)	L7 Aroclor-1260 {5}	16.16	16.31	5358466	5133160	1979.8 E	1632.9 E
	Sum Aroclor-1260			22096569	13551965	5678.3	3437.6
	Average Aroclor-1260					2389.160	1928.507

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
 (E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060766.D XPCBE30.M Sat Jun 09 13:36:07 2001

Page 1

Chromatographic Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060766.D\ECD1A.CH Vial: 47
 Acq On : 09 Jun 2001 9:16 Operator: DDC
 Sample : 46676.19 *E30H6 * Inst : HP_15
 Misc : *EPA*30.6G/5.0ML*45 Dilution: 1.00
 IntFile : events.e

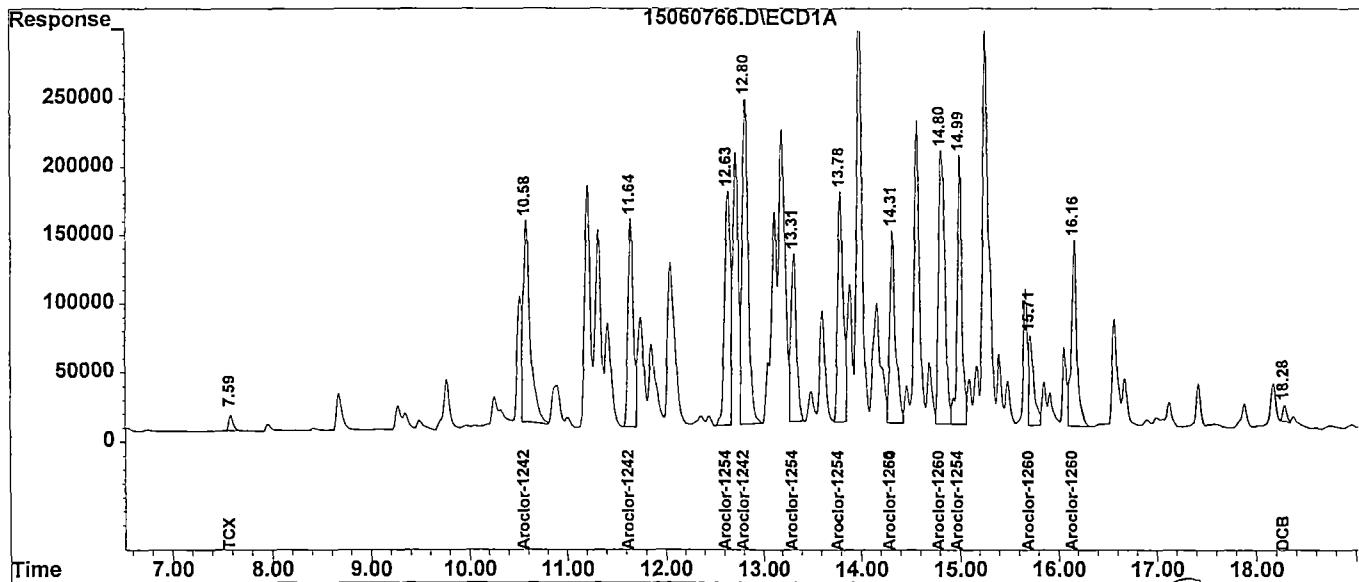
Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060766.D\ECD2B.CH Vial: 47
 Acq On : 09 Jun 2001 9:16 Operator: DDC
 Sample : 46676.19 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 13:35 2001 Quant Results File: XPCBE30.RES

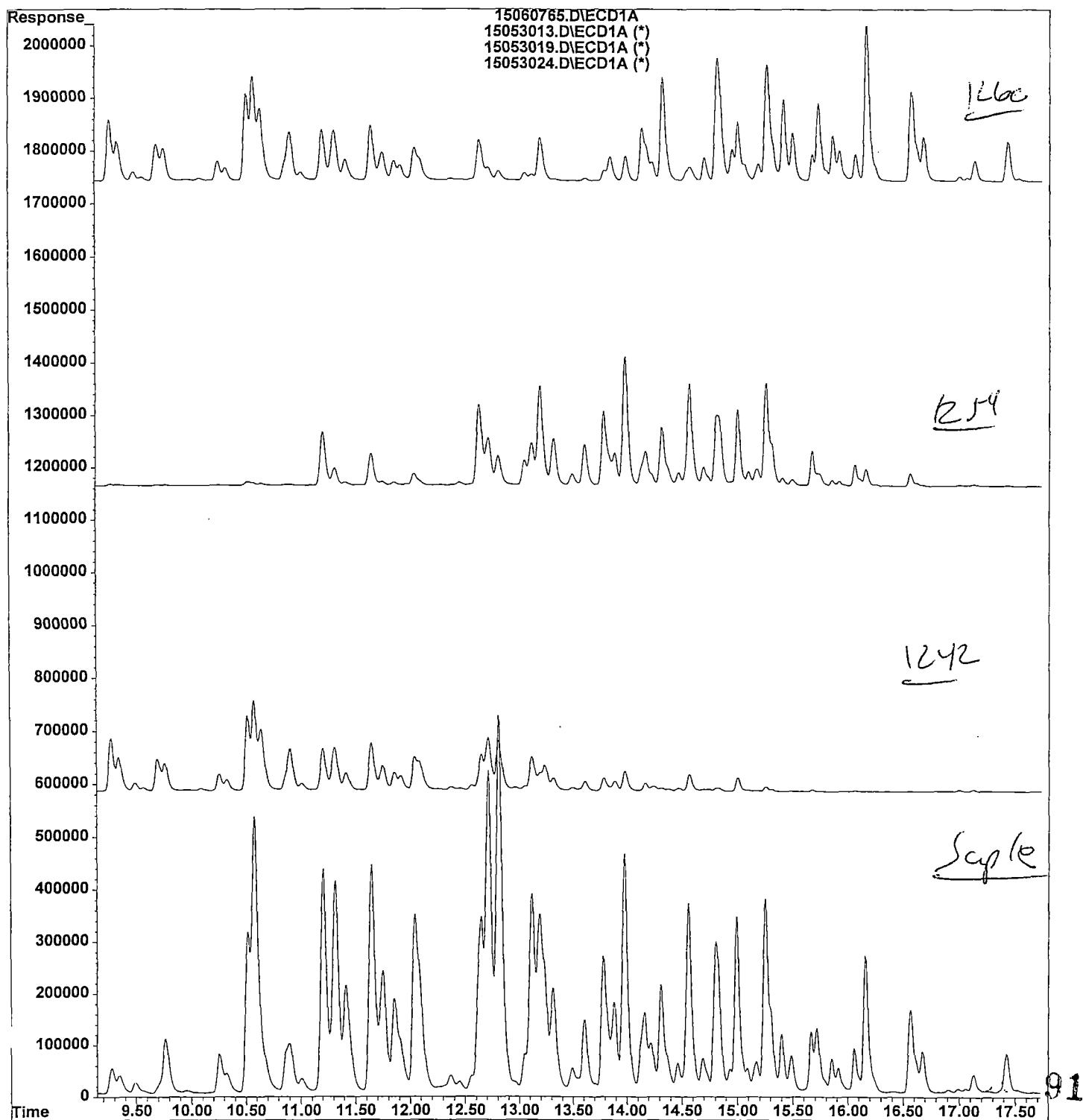
Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS
 Signal #1 Info : .32 mm
 Signal #1 Inst : HP_15A

Signal #2 Phase: DB-XLB
 Signal #2 Info : .32 mm
 Signal #2 Inst : HP_15B



File : F:\HPCHEM\HP\15\DATA\06_07_01\15060765.D
Operator : DDC
Acquired : 09 Jun 2001 8:53 using AcqMethod OLM03.M
Instrument : HP_15
Sample Name: 46676.18
Misc Info :
Vial Number: 46



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H6DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.19DL

Sample wt/vol: 30.6 (g/mL) G Lab File ID: _____

% Moisture: 45 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2-----Aroclor-1016		1200	U
11104-28-2-----Aroclor-1221		1200	U
11141-16-5-----Aroclor-1232		1200	U
53469-21-9-----Aroclor-1242		13000	D
12672-29-6-----Aroclor-1248		1200	U
11097-69-1-----Aroclor-1254		8000	D
11096-82-5-----Aroclor-1260		3200	D
Surrogate amount spiked		11.89	

Hillary
Walter
9/13/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060916.D\ECD1A.CH Vial: 16
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060916.D\ECD2B.CH
 Acq On : 09 Jun 2001 21:59 Operator: DDC
 Sample : 46676.19DL *E30H6DL * Inst : HP_15
 Misc : *EPA*30.6G/5.0ML*45 Dilution: 20.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 14:45 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	7.59	7.35	26959	24437	15.5	14.5	
	Spiked Amount	11.884		Recovery	=	130.43%	122.02%	
22)	S DCB	18.29	18.65f	20860	76595	12.4	45.0	#
	Spiked Amount	11.884		Recovery	=	104.35%	378.68%	

Target Compounds:

9)	L4 Aroclor-1242 {3}	10.58f	12.40	792005	292036	11761.8	10865.7	
10)	L4 Aroclor-1242 {4}	11.65	12.64	554753	420584	12368.9	15633.7	#
11)	L4 Aroclor-1242 {5}	12.83	13.16	987441	553357	18184.8 E	13478.3	#
	Sum Aroclor-1242			2334198	1265978	42315.5	39977.6	
	Average Aroclor-1242					14105.161	13325.864	

12)	L6 Aroclor-1254	12.64	0.00	625337	0	7039.7	N.D. d	#
13)	L6 Aroclor-1254 {2}	13.33	0.00	487590	0	10340.3	N.D. d	#
14)	L6 Aroclor-1254 {3}	13.80	13.93	559349	247272	7355.7	5801.6	
15)	L6 Aroclor-1254 {4}	14.32	14.93	572090	611544	9694.1	10210.8	
16)	L6 Aroclor-1254 {5}	15.00	15.39	464129	662340	7834.7	7896.3	
	Sum Aroclor-1254			2708495	1521156	42264.5	23908.7	
	Average Aroclor-1254					8452.901	7969.554	

17)	L7 Aroclor-1260	14.32	0.00	572090	0	5442.3	N.D. d	#
18)	L7 Aroclor-1260 {2}	14.82	0.00	820036	0	5732.9	N.D. d	#
19)	L7 Aroclor-1260 {3}	15.26	14.93	974299	611544	7377.1	5335.4	#
20)	L7 Aroclor-1260 {4}	15.72	16.09	194373	143222	3029.5	2164.2	#
21)	L7 Aroclor-1260 {5}	16.16	16.32	290183	355771	2144.3	2263.5	
	Sum Aroclor-1260			2850980	1110537	281949.5	116020.5	
	Average Aroclor-1260					4745.209	3254.376	

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(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
 (E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

15060916.D XPCBE30.M Mon Jun 11 14:45:54 2001

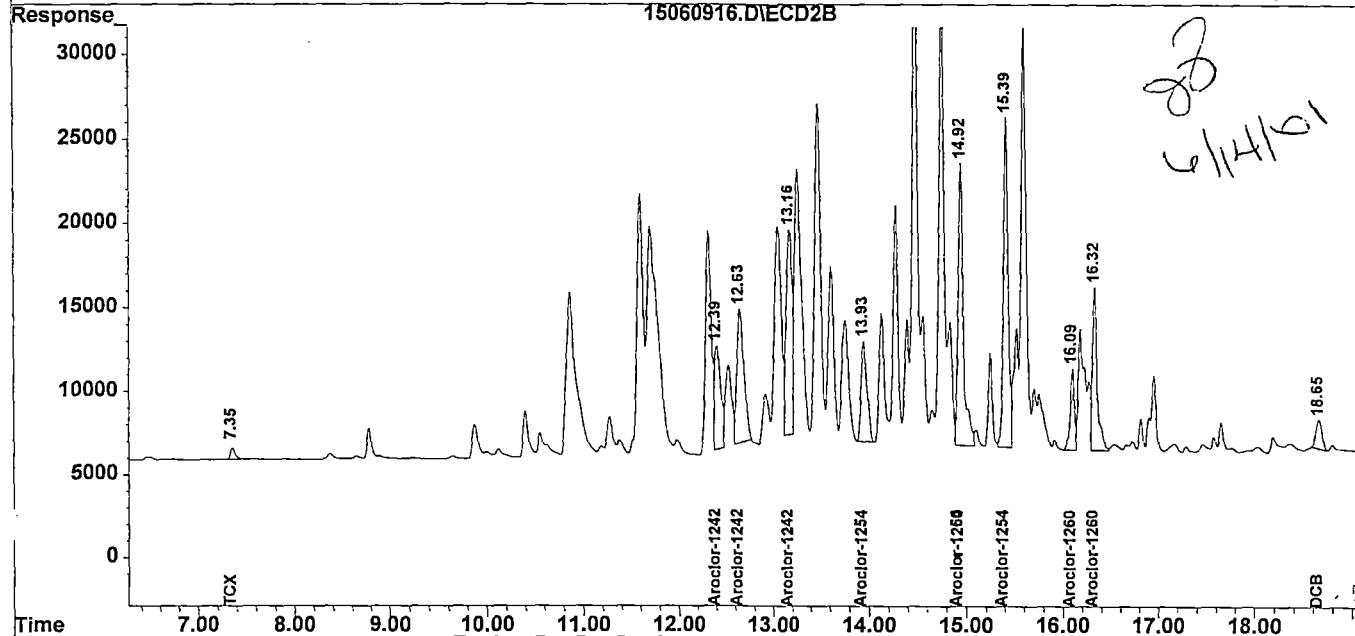
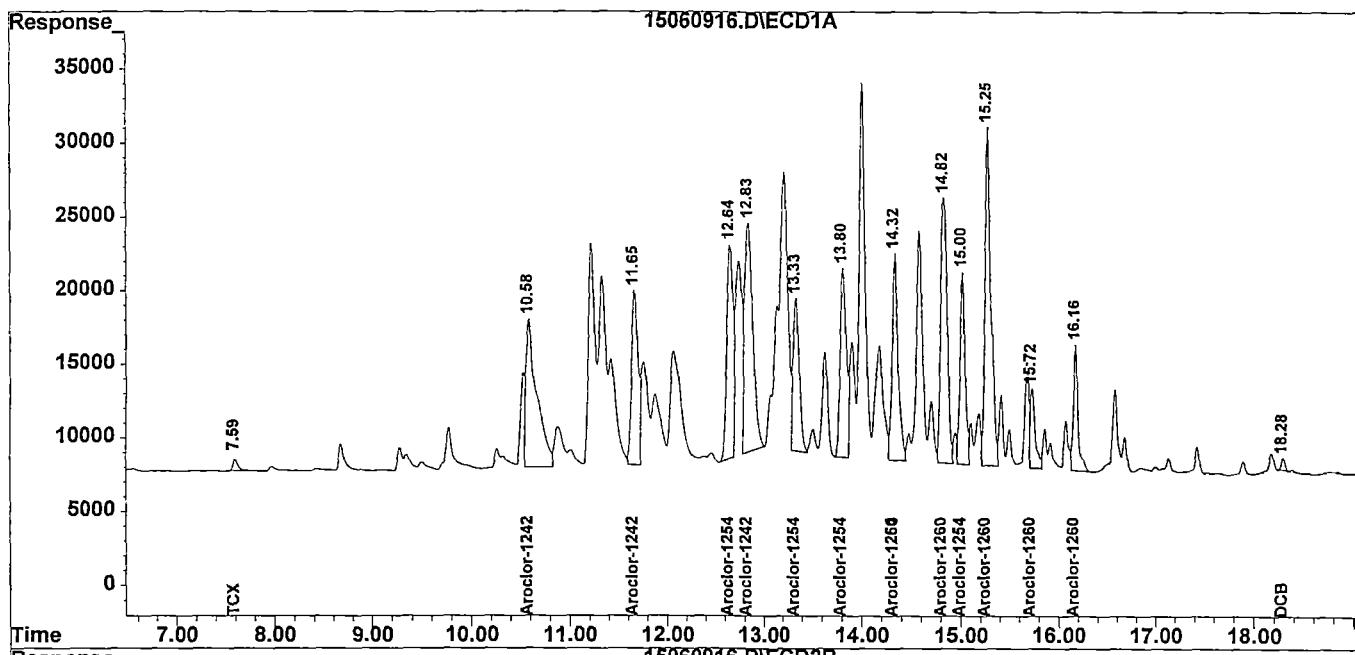
Page 1

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_09_01\15060916.D\ECD1A.CH Vial: 16
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_09_01\15060916.D\ECD2B.CH
 Acq On : 09 Jun 2001 21:59 Operator: DDC
 Sample : 46676.19DL *E30H6DL * Inst : HP_15
 Misc : *EPA*30.6G/5.0ML*45 Dilution: 20.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 14:45 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_09_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H7

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.20

Sample wt/vol: 30.9 (g/mL) G Lab File ID: _____

% Moisture: 11 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
12674-11-2-----Aroclor-1016		36	U
11104-28-2-----Aroclor-1221		36	U
11141-16-5-----Aroclor-1232		36	U
53469-21-9-----Aroclor-1242		36	U
12672-29-6-----Aroclor-1248		36	U
11097-69-1-----Aroclor-1254		36	U
11096-82-5-----Aroclor-1260		36	U
Surrogate amount spiked		7.27	

Hilary
Matthew
7/13/01

Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060767.D\ECD1A.CH Vial: 48
 Acq On : 09 Jun 2001 9:39 Operator: DDC
 Sample : 46676.20 *E30H7 * Inst : HP_15
 Misc : *EPA*30.9G/5.0ML*11 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060767.D\ECD2B.CH Vial: 48
 Acq On : 09 Jun 2001 9:39 Operator: DDC
 Sample : 46676.20 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 13:39 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
<hr/>							
	System Monitoring Compounds:						
1)	S TCX	7.59	7.35	323050	317611	5.682	5.784
	Spiked Amount	7.272		Recovery	=	78.13%	79.53%
22)	S DCB	18.28	18.68	304287	274251	5.514	4.925
	Spiked Amount	7.272		Recovery	=	75.82%	67.72%

Target Compounds:

Chromatographic Report

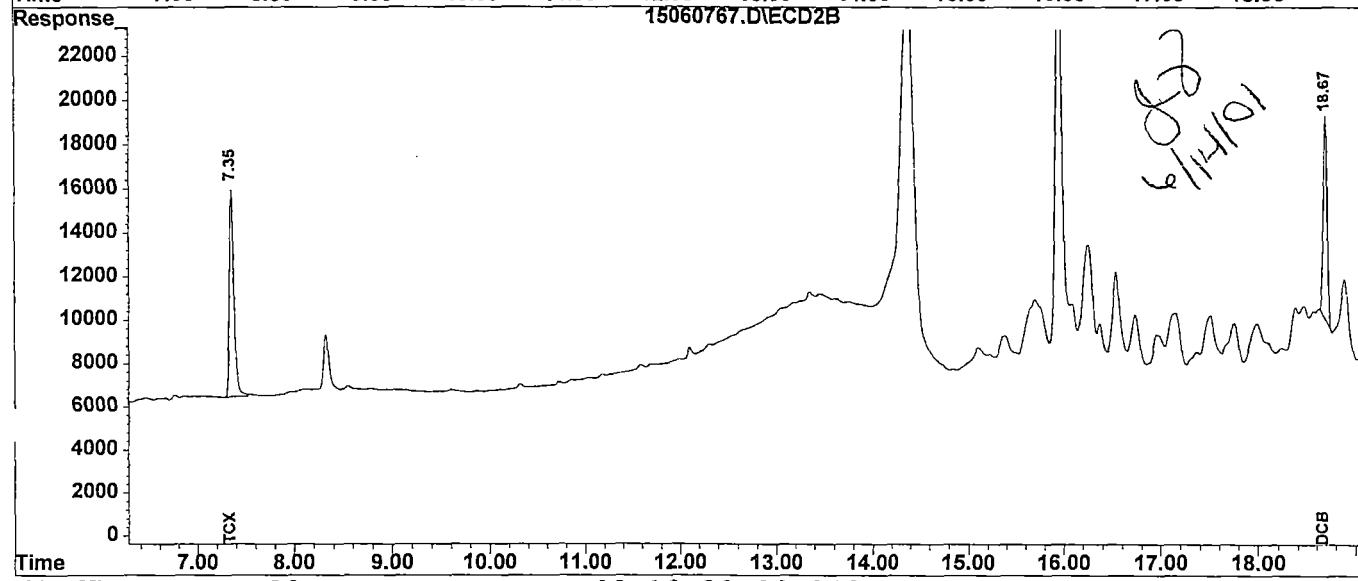
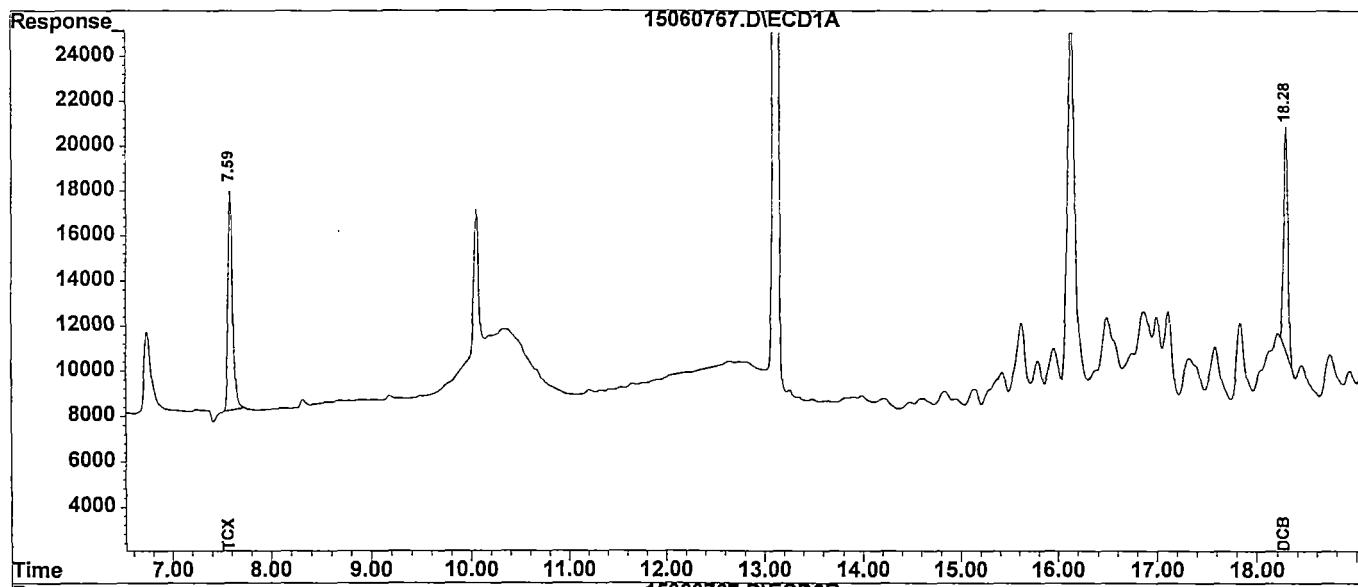
Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060767.D\ECD1A.CH Vial: 48
 Acq On : 09 Jun 2001 9:39 Operator: DDC
 Sample : 46676.20 *E30H7 * Inst : HP_15
 Misc : *EPA*30.9G/5.0ML*11 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060767.D\ECD2B.CH Vial: 48
 Acq On : 09 Jun 2001 9:39 Operator: DDC
 Sample : 46676.20 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 13:39 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL	Signal #1 Phase : DB-17MS	Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm	Signal #2 Info : .32 mm	Signal #2 Inst : HP_15B
Signal #1 Inst : HP_15A		



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H8

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.21

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 10 decanted: (Y/N) _____ Date Received: 06/02/01

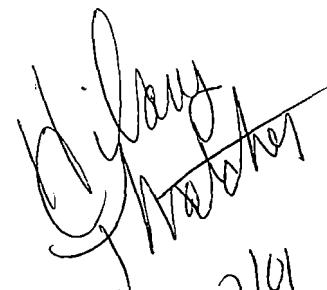
Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
12674-11-2-----	Aroclor-1016	36	U
11104-28-2-----	Aroclor-1221	36	U
11141-16-5-----	Aroclor-1232	36	U
53469-21-9-----	Aroclor-1242	36	U
12672-29-6-----	Aroclor-1248	36	U
11097-69-1-----	Aroclor-1254	36	U
11096-82-5-----	Aroclor-1260	36	U
Surrogate amount spiked		7.36	


Shirley Walker
7/13/01

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Quantitation Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060768.D\ECD1A.CH Vial: 49
 Acq On : 09 Jun 2001 10:02 Operator: DDC
 Sample : 46676.21 *E30H8 * Inst : HP_15
 Misc : *EPA*30.2G/5.0ML*10 Dilution: 1.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060768.D\ECD2B.CH Vial: 49
 Acq On : 09 Jun 2001 10:02 Operator: DDC
 Sample : 46676.21 Inst : HP_15
 Misc : Dilution: 1.00
 IntFile : events2.e

Quant Time: Jun 9 13:40 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S TCX	7.59	7.35	306196	317481	5.449	5.850
Spiked Amount	7.358		Recovery	=	74.05%	79.50%
22) S DCB	18.28	18.68	298308	262998	5.470	4.779
Spiked Amount	7.358		Recovery	=	74.34%	64.95%

Target Compounds:

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
 (E)=> Highest cal. std. (d)=compound deleted (H) Dil. < med. std
 15060768.D XPCBE30.M Sat Jun 09 13:40:31 2001

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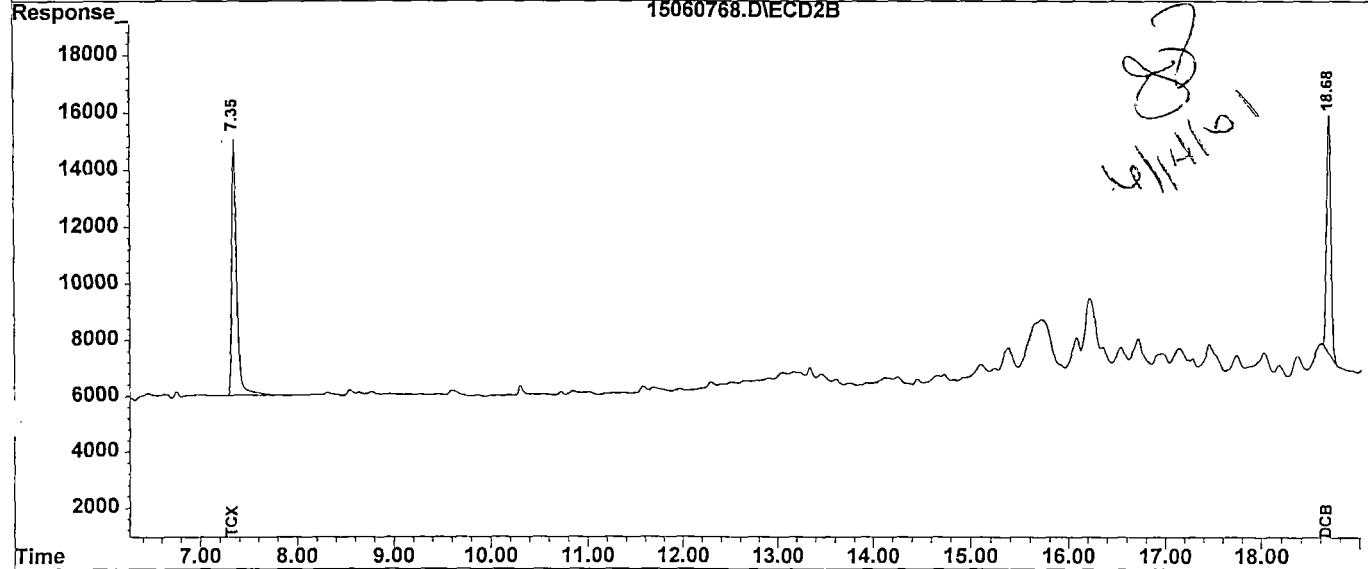
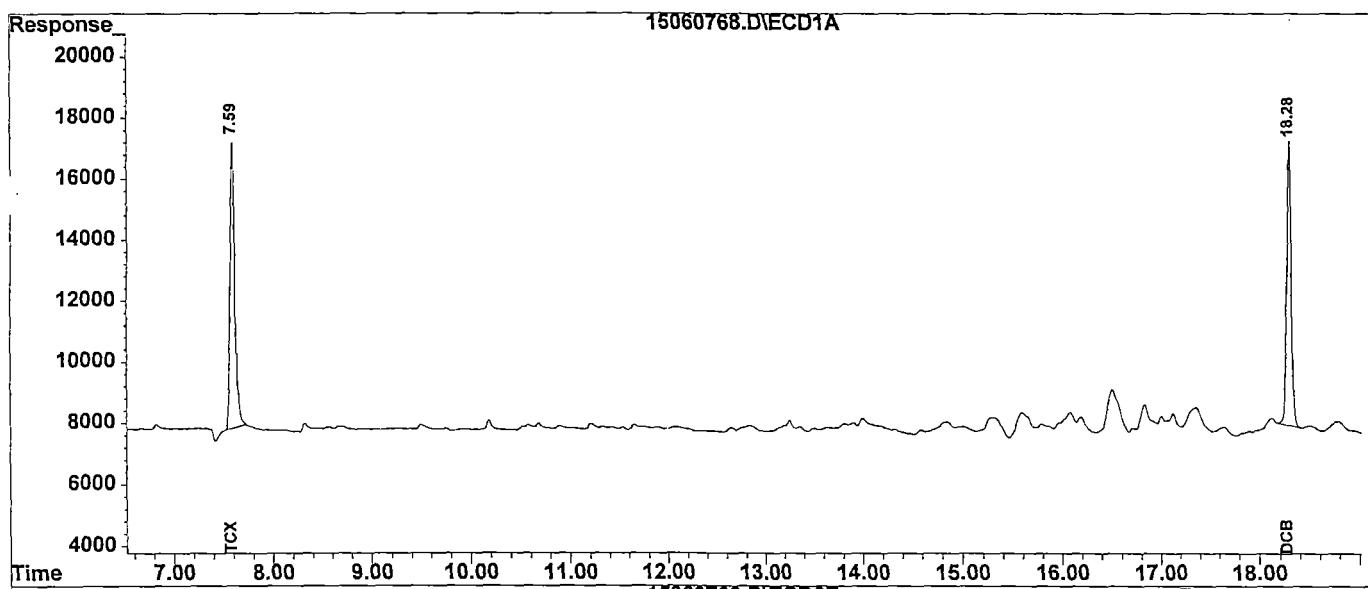
Chromatographic Report

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060768.D\ECD1A.CH Vial: 49
Acq On : 09 Jun 2001 10:02 Operator: DDC
Sample : 46676.21 *E30H8 * Inst : HP_15
Misc : *EPA*30.2G/5.0ML*10 Dilution: 1.00
IntFile : events.e

Data File : F:\HPCHEM\HP\15\DATA\06_07_01\15060768.D\ECD2B.CH Vial: 49
Acq On : 09 Jun 2001 10:02 Operator: DDC
Sample : 46676.21 Inst : HP_15
Misc : Dilution: 1.00
IntFile : events2.e
Quant Time: Jun 9 13:40 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\xpcbe30.m
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
Last Update : Thu Jun 07 08:46:05 2001
Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP 15A Signal #2 Inst : HP 15B



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H9

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.22

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 31 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/09/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2-----	Aroclor-1016	48	U	
11104-28-2-----	Aroclor-1221	48	U	
11141-16-5-----	Aroclor-1232	48	U	
53469-21-9-----	Aroclor-1242	48	U	
12672-29-6-----	Aroclor-1248	48	U	
11097-69-1-----	Aroclor-1254	48	U	
11096-82-5-----	Aroclor-1260	48	U	
Surrogate amount spiked		9.60		

*Wifaret
Wanatha
2/13/01*

101

Quantitation Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_07_01\15060769.D\ECD1A.CH Vial: 50
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_07_01\15060769.D\ECD2B.CH
 Acq On : 09 Jun 2001 10:25 Operator: DDC
 Sample : 46676.22 *E30H9 * Inst : HP_15
 Misc : *EPA*30.2G/5.0ML*31 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 9 13:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17MS Signal #2 Phase: DB-XLB
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_15A Signal #2 Inst : HP_15B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
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System Monitoring Compounds:

1) S TCX	7.59	7.35	452264	454463	10.5	10.9
Spiked Amount	9.598		Recovery	=	109.40%	113.57%
22) S DCB	18.28	18.68	525772	534075	12.6	12.7
Spiked Amount	9.598		Recovery	=	131.28%	132.32%

Target Compounds:

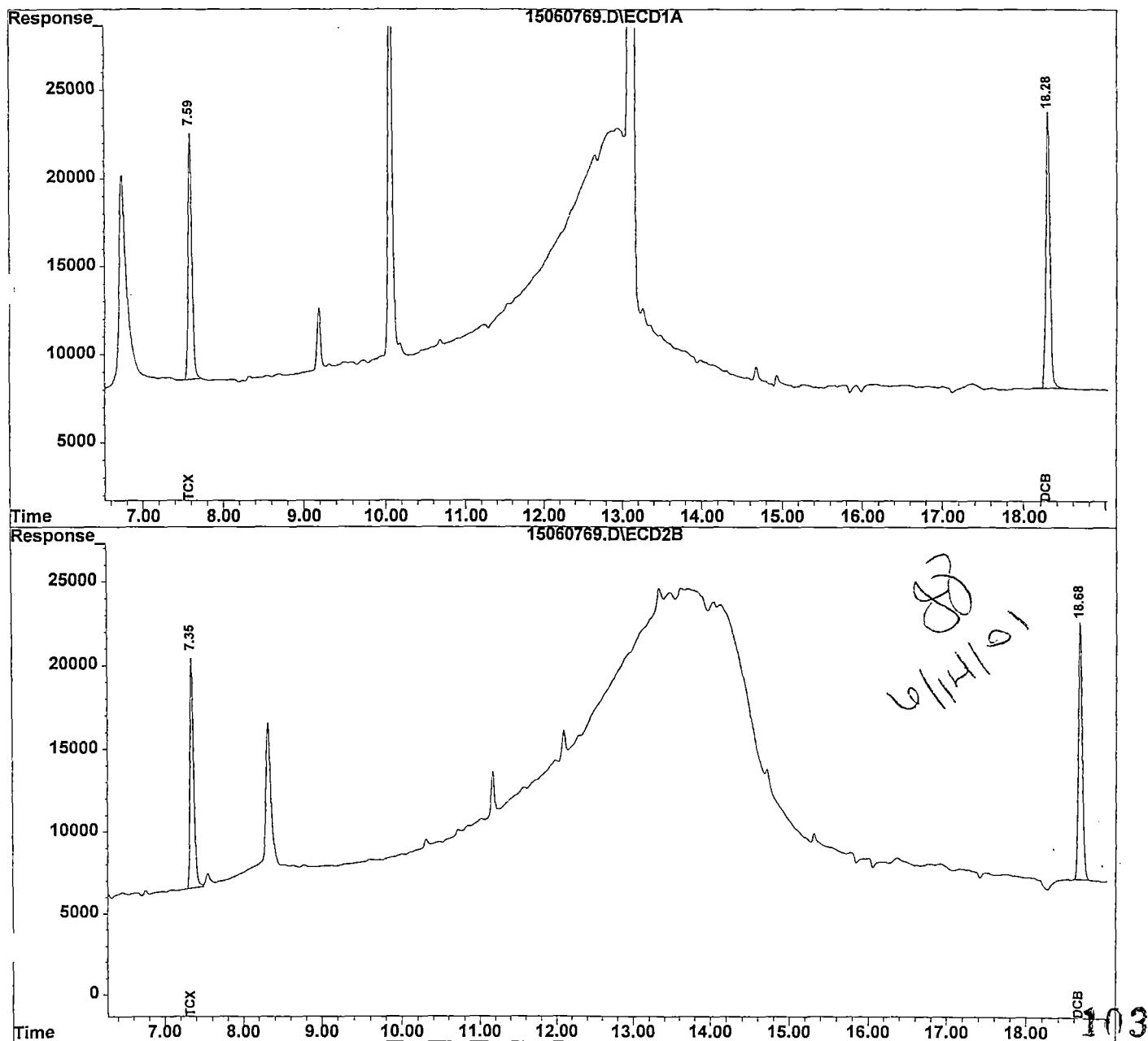
----- 102
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
 (E)=> Highest cal. std. (d)=compound deleted (H) Dil. < med. std
 15060769.D XPCBE30.M Sat Jun 09 15:55:32 2001

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\15\DATA\06_07_01\15060769.D\ECD1A.CH Vial: 50
 Signal #2 : F:\HPCHEM\HP\15\DATA\06_07_01\15060769.D\ECD2B.CH
 Acq On : 09 Jun 2001 10:25 Operator: DDC
 Sample : 46676.22 *E30H9 * Inst : HP_15
 Misc : *EPA*30.2G/5.0ML*31 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 9 13:41 2001 Quant Results File: XPCBE30.RES

Method : F:\HPCHEM\HP\15\DATA\06_07_01\XPCBE30.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\15\DATA\05_30_01\
 Last Update : Thu Jun 07 08:46:05 2001
 Response via : Multiple Level Calibration

Volume Inj.	: 0.5uL		
Signal #1 Phase	: DB-17MS	Signal #2 Phase:	DB-XLB
Signal #1 Info	: .32 mm	Signal #2 Info	: .32 mm
Signal #1 Inst	: HP_15A	Signal #2 Inst	: HP_15B



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30J0

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.23

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 22 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/10/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q		
		42	U	800 D
12674-11-2-----Aroclor-1016		42	U	
11104-28-2-----Aroclor-1221		42	U	
11141-16-5-----Aroclor-1232		42	U	
53469-21-9-----Aroclor-1242		700	BP	
12672-29-6-----Aroclor-1248		42	U	
11097-69-1-----Aroclor-1254		290		
11096-82-5-----Aroclor-1260		91		
Surrogate amount spiked		8.52		

TB
7/16/01

W. James Johnson
7/13/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060969.D\ECD1A.CH Vial: 69
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060969.D\ECD2B.CH
 Acq On : 10 Jun 2001 16:29 Operator: DDC
 Sample : 46676.23 *E30J0 * Inst : HP_03
 Misc : *EPA*30.1G/5.0ML*22 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 16:18 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
 Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S TCX	6.45	6.47	308030	137463	5.108	5.960
Spiked Amount	8.519		Recovery	=	59.96%	69.96%
22) S DCB	17.10	18.40	410126	220130	7.502	7.911
Spiked Amount	8.519		Recovery	=	88.07%	92.87%

Target Compounds:

7) L Aroclor-1242	8.74	7.80	756136	108210	657.5 E	314.2 #
8) L4 Aroclor-1242 {2}	9.00f	9.14	1029229	424882	2489.8 E	1063.7 E#
9) L4 Aroclor-1242 {3}	9.56	9.69	990109	87878	682.3 E	237.9 #
10) L4 Aroclor-1242 {4}	10.16f	10.66	2053815	558099	1132.2 E	1168.1 E
11) L4 Aroclor-1242 {5}	10.68f	0.00	685934	0	1023.2 E	N.D. d #
Sum Aroclor-1242			5515222	1179069	5984.9	2783.8
Average Aroclor-1242					1196.988	695.955
13) L6 Aroclor-1254 {2}	0.00	11.39	0	189411	N.D. d	238.2 #
14) L6 Aroclor-1254 {3}	12.32f	11.98	781860	245902	379.5	334.6
15) L6 Aroclor-1254 {4}	12.73	12.17	205542	566626	239.2	298.3
16) L6 Aroclor-1254 {5}	13.09	12.60	913004	343006	259.3	289.0
Sum Aroclor-1254			1900407	1344946	878.0	1160.1
Average Aroclor-1254					292.683	290.022
18) L7 Aroclor-1260 {2}	12.51	12.60	316358	343006	107.1	195.9 #
20) L7 Aroclor-1260 {4}	13.66	14.03	283302	35681	176.1	32.2 #
21) L7 Aroclor-1260 {5}	14.12	14.27	183690	118603	48.6	45.1
Sum Aroclor-1260			783350	497290	141.3	116.4
Average Aroclor-1260					110.595	91.056

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(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

3_060969.D XPCBF09.M Mon Jun 11 16:32:54 2001

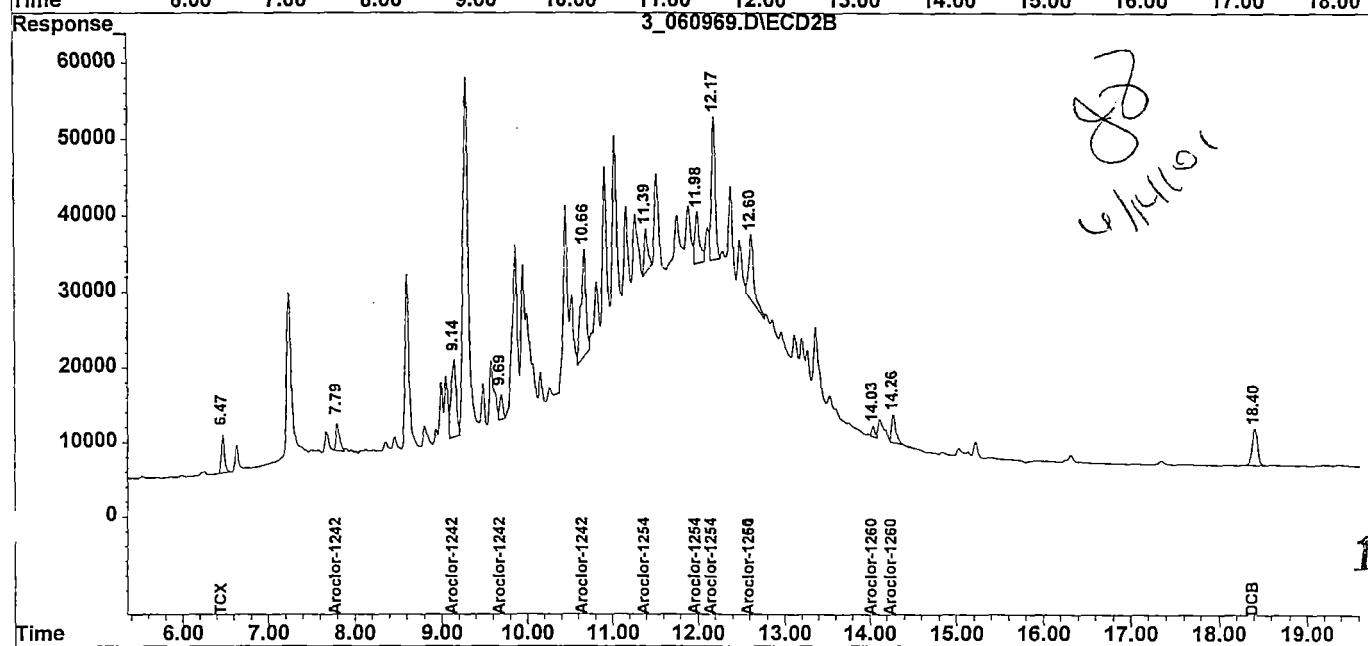
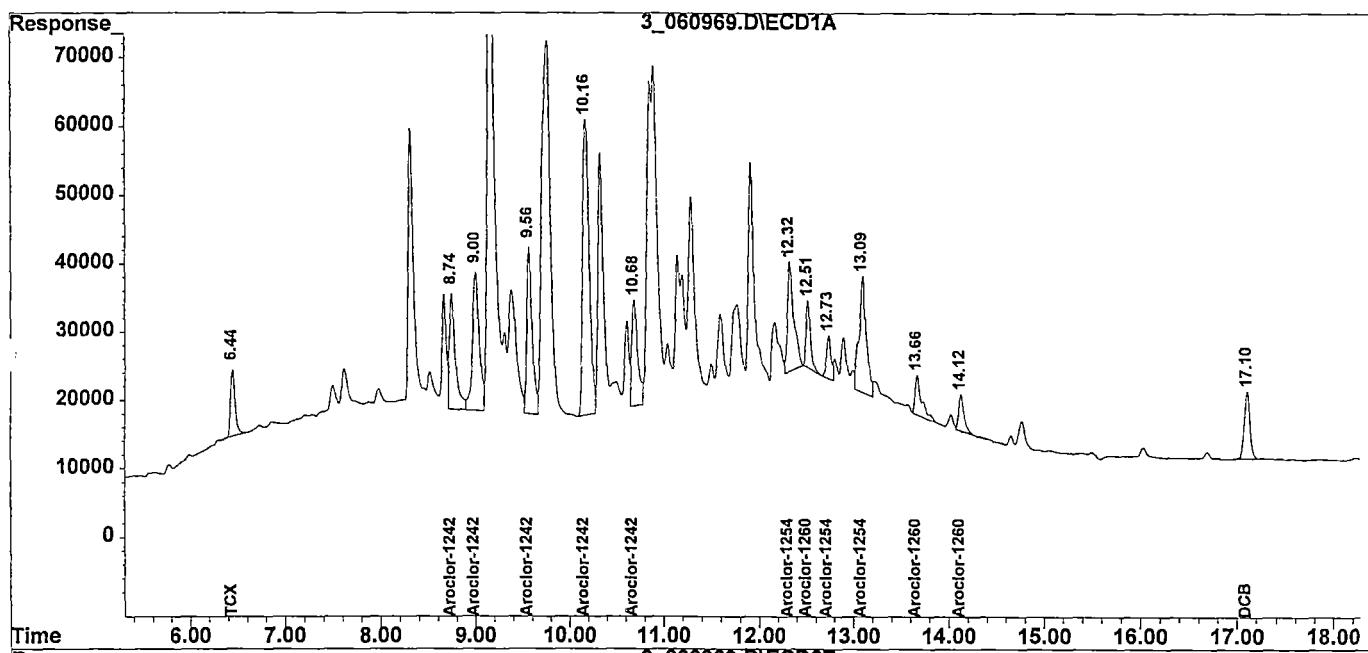
Page 1

Chromatographic Report

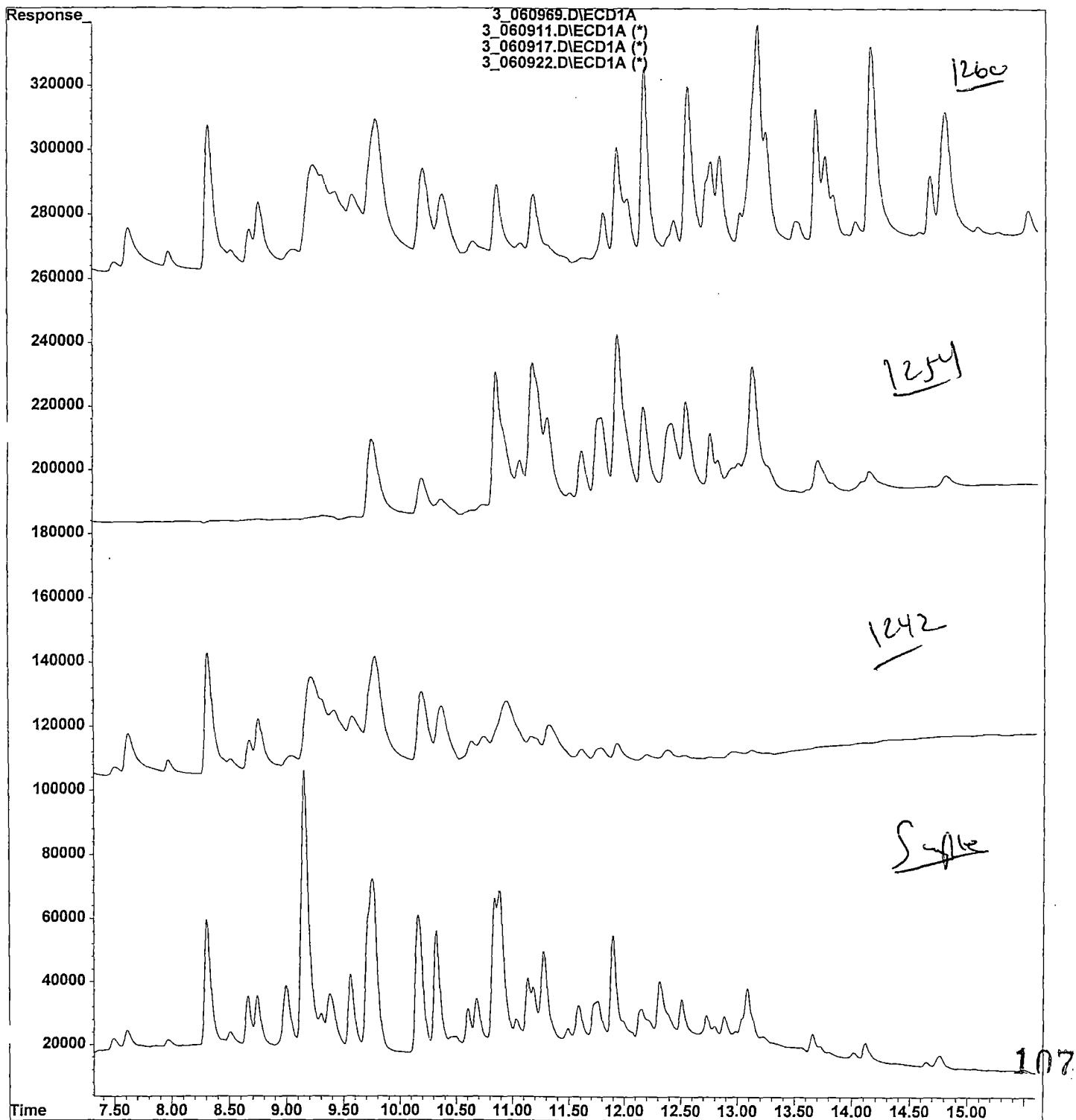
Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060969.D\ECD1A.CH Vial: 69
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060969.D\ECD2B.CH
 Acq On : 10 Jun 2001 16:29 Operator: DDC
 Sample : 46676.23 *E30J0 * Inst : HP_03
 Misc : *EPA*30.1G/5.0ML*22 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 16:18 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



File : F:\HPCHEM\HP\3\DATA\06_09_01\3_060969.D
Operator : DDC
Acquired : 10 Jun 2001 16:29 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 46676.23
Misc Info :
Vial Number: 69



1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30J0DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.23DL

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 22 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/01

Injection Volume: 0.5(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
12674-11-2-----	Aroclor-1016	84	U
11104-28-2-----	Aroclor-1221	84	U
11141-16-5-----	Aroclor-1232	84	U
53469-21-9-----	Aroclor-1242	800	D
12672-29-6-----	Aroclor-1248	84	U
11097-69-1-----	Aroclor-1254	380	D
11096-82-5-----	Aroclor-1260	150	D
Surrogate amount spiked		8.52	

Vilayat Mardol
2/13/01

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Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\06_12_01\3_061207.D\ECD1A.CH Vial: 1
 Acq On : 12 Jun 2001 12:17 Operator: DDC
 Sample : 46676.23DL *E30J0DL * Inst : HP_03
 Misc : *EPA*30.1G/5.0ML*22 Dilution: 2.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\06_12_01\3_061207.D\ECD2B.CH Vial: 1
 Acq On : 12 Jun 2001 12:17 Operator: DDC
 Sample : 46676.23DL Inst : HP_03
 Misc : Dilution: 2.00
 IntFile : events2.e

Quant Time: Jun 13 8:52 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_12_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	6.47f	6.48	160303	62212	5.317	5.394
	Spiked Amount	8.519		Recovery	=	62.42%	63.32%
22)	L DCB	17.15	18.44	216604	109206	7.924	7.849
	Spiked Amount	8.519		Recovery	=	93.02%	92.14%

Target Compounds:

7)	L4 Aroclor-1242	8.77	0.00	332279	0	577.9	N.D. d #
8)	L4 Aroclor-1242 {2}	0.00	9.16	0	229358	N.D. d	1148.4 #
9)	L4 Aroclor-1242 {3}	9.60	9.71	523857	57180	722.0	309.5 #
10)	L4 Aroclor-1242 {4}	0.00	10.68	0	320388	N.D. d	1341.1 E#
11)	L4 Aroclor-1242 {5}	10.72	0.00	366311	0	1092.8	N.D. d #
	Sum Aroclor-1242			1222447	606926	2392.7	2799.0
	Average Aroclor-1242					797.567	933.009

13)	L6 Aroclor-1254 {2}	11.62	11.41	283007	166846	558.0	419.6
14)	L6 Aroclor-1254 {3}	12.36	12.00	520416	120994	505.2	329.3 #
15)	L6 Aroclor-1254 {4}	12.76	12.19	103982	381526	242.0	401.7 #
16)	L6 Aroclor-1254 {5}	13.12	12.62	353908	248753	201.0	419.2 #
	Sum Aroclor-1254			1261313	918120	1506.3	1569.8
	Average Aroclor-1254					376.576	392.438

18)	L7 Aroclor-1260 {2}	12.54	12.62	255372	248753	173.0	284.1 #
19)	L7 Aroclor-1260 {3}	13.12f	13.38f	353908	157470	149.3	122.5
20)	L7 Aroclor-1260 {4}	13.69	0.00	95092	0	118.2	N.D. d #
21)	L7 Aroclor-1260 {5}	0.00	14.28	0	70206	N.D. d	53.4 #
	Sum Aroclor-1260			704372	476429	375.3	391.8
	Average Aroclor-1260					146.839	153.330

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(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

3_061207.D XPCBF09.M Wed Jun 13 08:53:21 2001

Page 1

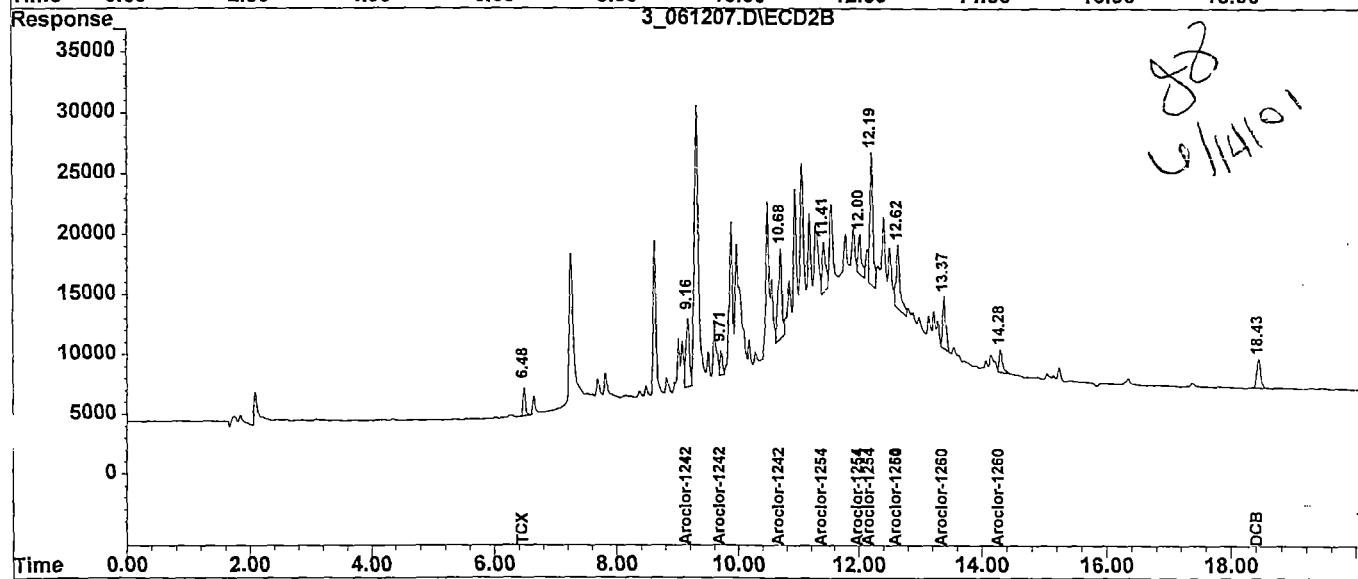
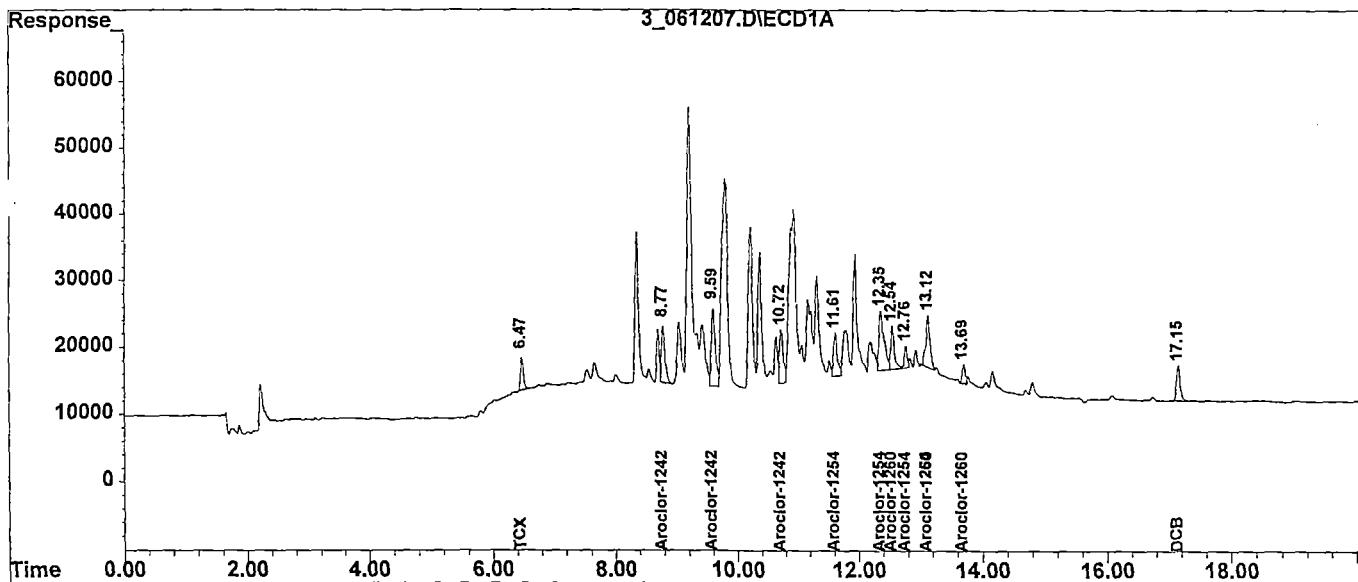
Chromatographic Report

Data File : F:\HPCHEM\HP\3\DATA\06_12_01\3_061207.D\ECD1A.CH Vial: 1
 Acq On : 12 Jun 2001 12:17 Operator: DDC
 Sample : 46676.23DL *E30J0DL * Inst : HP_03
 Misc : *EPA*30.1G/5.0ML*22 Dilution: 2.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\06_12_01\3_061207.D\ECD2B.CH Vial: 1
 Acq On : 12 Jun 2001 12:17 Operator: DDC
 Sample : 46676.23DL Inst : HP_03
 Misc : Dilution: 2.00
 IntFile : events2.e
 Quant Time: Jun 13 8:52 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_12_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17
 Signal #1 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Phase: DB-1701
 Signal #2 Info : .32 mm
 Signal #2 Inst : HP_03B



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30J1

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.24

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 22 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/10/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
12674-11-2-----Aroclor-1016		42	U
11104-28-2-----Aroclor-1221		42	U
11141-16-5-----Aroclor-1232		42	U
53469-21-9-----Aroclor-1242		930	E
12672-29-6-----Aroclor-1248		42	U
11097-69-1-----Aroclor-1254		240	
11096-82-5-----Aroclor-1260		80	
Surrogate amount spiked		8.52	

710 D

TB
7/16/07

*Jeffrey
Nash
7/13/07*

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060970.D\ECD1A.CH Vial: 70
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060970.D\ECD2B.CH
 Acq On : 10 Jun 2001 16:54 Operator: DDC
 Sample : 46676.24 *E30J1 * Inst : HP_03
 Misc : *EPA*30.1G/5.0ML*22 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 16:20 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	6.45	6.47	277392	131402	4.600	5.697
	Spiked Amount	8.519		Recovery	=	54.00%	66.88%
22)	S DCB	17.11	18.40	382415	200255	6.995	7.197
	Spiked Amount	8.519		Recovery	=	82.11%	84.49%

Target Compounds:

7)	Aroclor-1242	8.74	7.80	726209	218685	631.5 E	635.0
8)	L4 Aroclor-1242 {2}	0.00	9.14	0	567928	N.D. d	1421.8 E#
9)	L4 Aroclor-1242 {3}	9.56	0.00	997467	0	687.4 E	N.D. d #
10)	L4 Aroclor-1242 {4}	10.16f	10.66	2283068	475588	1258.6 E	995.4 E
11)	L4 Aroclor-1242 {5}	10.68f	11.02f	768021	901185	1145.6 E	1348.0 E
	Sum Aroclor-1242			4774765	2163386	3723.0	4400.1
	Average Aroclor-1242					930.759	1100.033
13)	L6 Aroclor-1254 {2}	0.00	11.39	0	194486	N.D. d	244.5 #
14)	L6 Aroclor-1254 {3}	12.32f	11.98	782953	154111	380.1	209.7 #
15)	L6 Aroclor-1254 {4}	12.73	12.17	180165	536038	209.7	282.2 #
16)	L6 Aroclor-1254 {5}	13.09	12.60	789875	259990	224.4	219.1
	Sum Aroclor-1254			1752994	1144625	814.1	955.5
	Average Aroclor-1254					271.358	238.876
18)	L7 Aroclor-1260 {2}	12.51	12.60	326835	259990	110.7	148.5 #
20)	L7 Aroclor-1260 {4}	13.66	14.04	179175	40277	111.4	36.3 #
21)	L7 Aroclor-1260 {5}	14.12	14.27	238459	147800	63.0	56.2
	Sum Aroclor-1260			744469	448067	121.4	102.6
	Average Aroclor-1260					95.030	80.333

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(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
 (E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

3_060970.D XPCBF09.M Mon Jun 11 16:33:05 2001

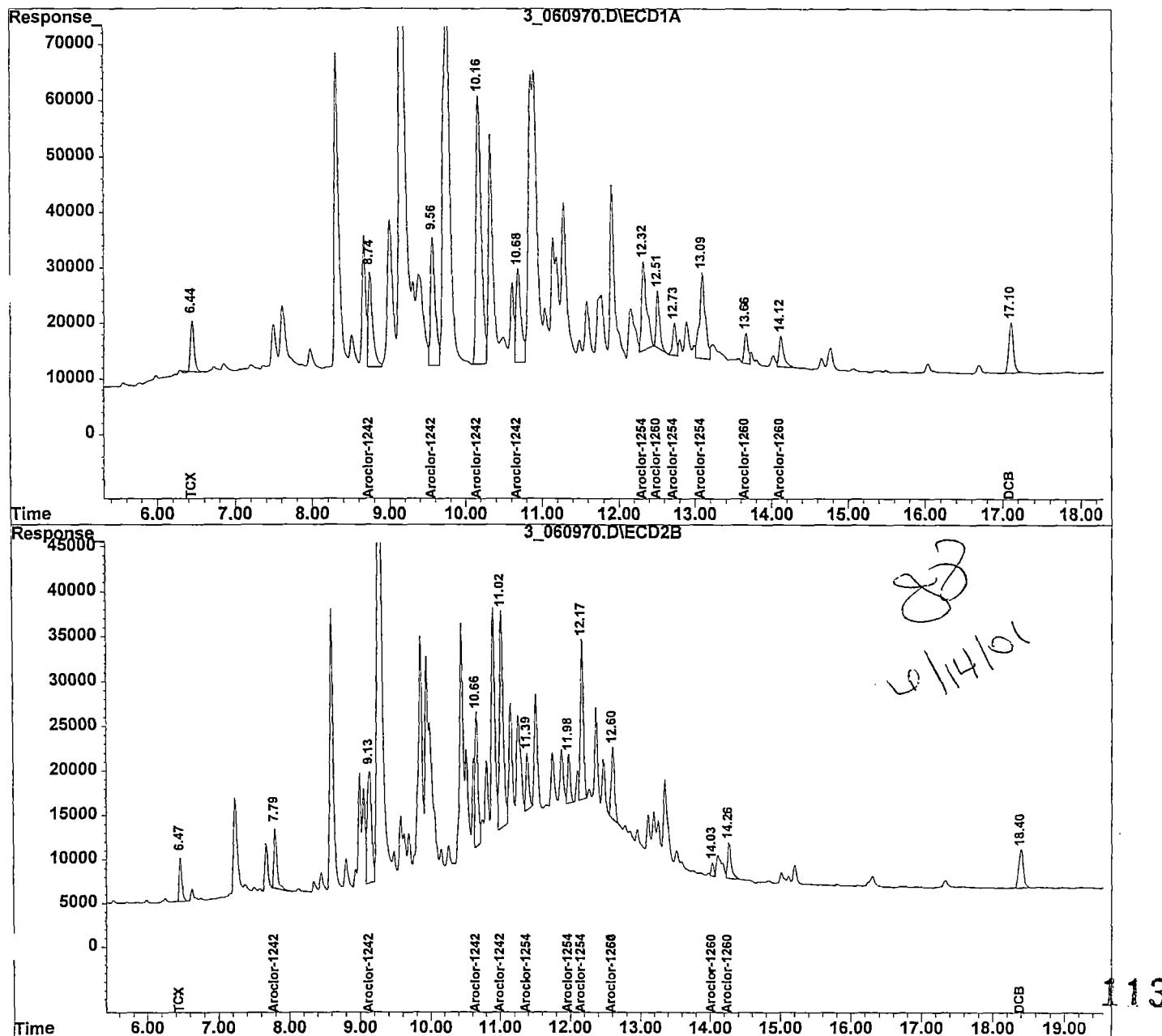
Page 1

Chromatographic Report

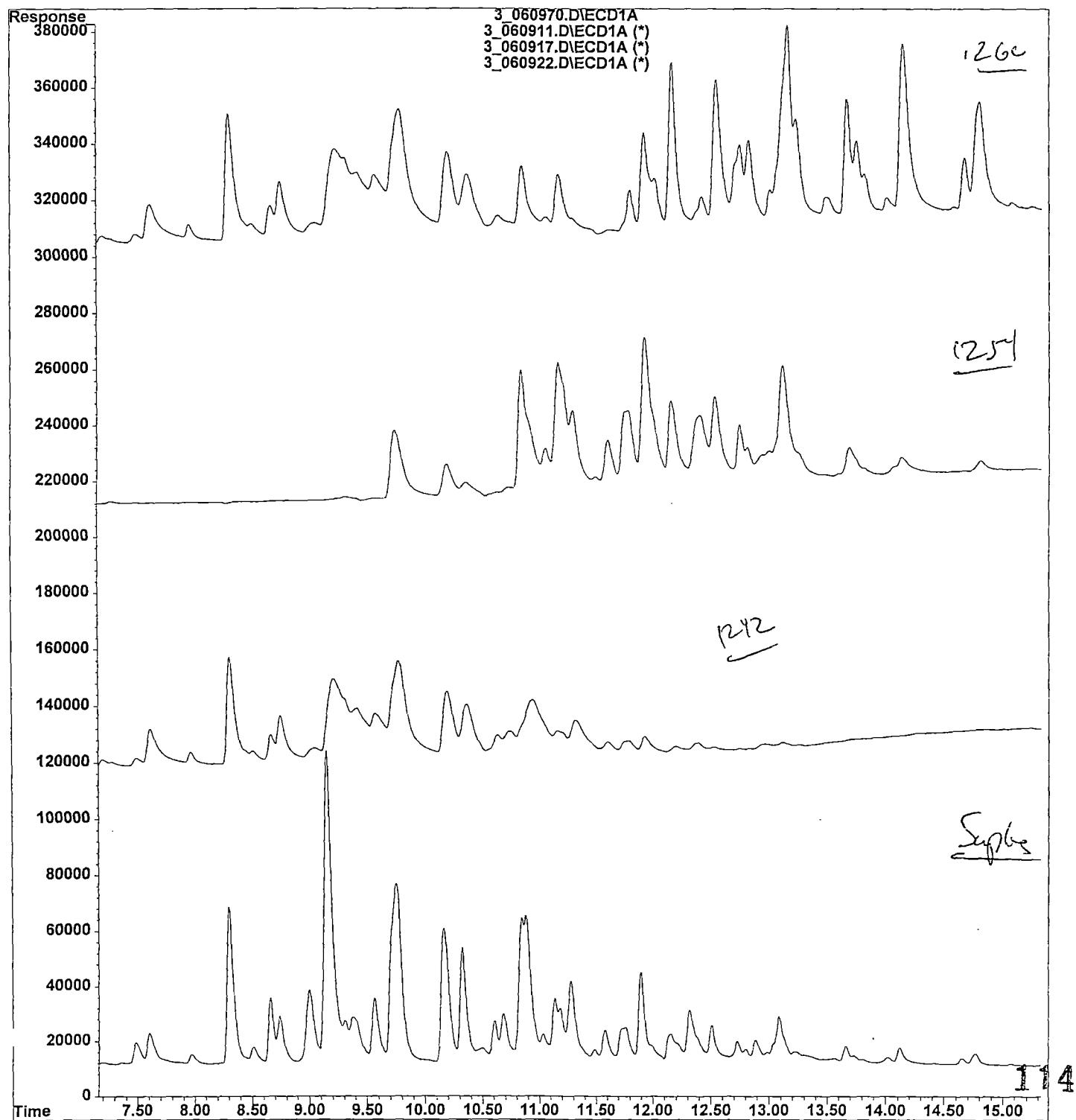
Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060970.D\ECD1A.CH Vial: 70
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060970.D\ECD2B.CH
 Acq On : 10 Jun 2001 16:54 Operator: DDC
 Sample : 46676.24 *E30J1 * Inst : HP_03
 Misc : *EPA*30.1G/5.0ML*22 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 16:20 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



File : F:\HPCHEM\HP\3\DATA\06_09_01\3_060970.D
Operator : DDC
Acquired : 10 Jun 2001 16:54 using AcqMethod OLM03.M
Instrument : HP 03
Sample Name: 46676.24
Misc Info :
Vial Number: 70



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E30J1DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.24DL

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 22 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/12/01

Injection Volume: 0.5 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG Q
12674-11-2-----	Aroclor-1016	84	U
11104-28-2-----	Aroclor-1221	84	U
11141-16-5-----	Aroclor-1232	84	U
53469-21-9-----	Aroclor-1242	710	D
12672-29-6-----	Aroclor-1248	84	U
11097-69-1-----	Aroclor-1254	340	D
11096-82-5-----	Aroclor-1260	120	D
Surrogate amount spiked		8.52	

*P. Lelak
7/13/01*

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_12_01\3_061208.D\ECD1A.CH Vial: 2
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_12_01\3_061208.D\ECD2B.CH
 Acq On : 12 Jun 2001 12:42 Operator: DDC
 Sample : 46676.24DL *E30J1DL * Inst : HP_03
 Misc : *EPA*30.1G/5.0ML*22 Dilution: 2.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 15 7:42 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_12_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
<hr/>							
	System Monitoring Compounds:						
1)	S TCX	6.46	6.48	157625	66842	5.228	5.796
	Spiked Amount	8.519		Recovery	=	61.37%	68.04%
22)	S DCB	17.12	18.41	223395	115165	8.172	8.278
	Spiked Amount	8.519		Recovery	=	95.93%	97.18%
<hr/>							
	Target Compounds:						
7)	L4 Aroclor-1242	8.76	7.80	372573	97334	648.0	565.3
8)	L4 Aroclor-1242 {2}	0.00	9.14	0	241059	N.D. d	1207.0 #
9)	L4 Aroclor-1242 {3}	9.58	9.70	380312	67465	524.2	365.2 #
11)	L4 Aroclor-1242 {5}	10.70f	0.00	425852	0	1270.4	N.D. d #
	Sum Aroclor-1242			1178737	405858	2442.6	2137.4
	Average Aroclor-1242					814.187	712.478
13)	L6 Aroclor-1254 {2}	11.60	11.40	272083	156706	536.5	394.1 #
14)	L6 Aroclor-1254 {3}	12.34	11.99	552107	96768	536.0	263.4 #
15)	L6 Aroclor-1254 {4}	12.74	12.18	96136	361705	223.7	380.8 #
16)	L6 Aroclor-1254 {5}	13.10	12.61	366918	191522	208.4	322.7 #
	Sum Aroclor-1254			1287244	806702	1504.7	1361.0
	Average Aroclor-1254					376.165	340.251
17)	L7 Aroclor-1260	12.16	0.00	211720	0	140.6	N.D. d #
18)	L7 Aroclor-1260 {2}	12.52	12.61	264069	191522	178.8	218.8
19)	L7 Aroclor-1260 {3}	13.10f	13.36f	366918	177936	154.8	138.4
20)	L7 Aroclor-1260 {4}	13.67	14.04	99261	24549	123.4	44.3 #
21)	L7 Aroclor-1260 {5}	14.13	14.27	91876	87800	48.6	66.8 #
	Sum Aroclor-1260			1033844	481808	550.6	398.8
	Average Aroclor-1260					129.260	117.050

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(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

3_061208.D XPCBF09.M Fri Jun 15 07:43:15 2001

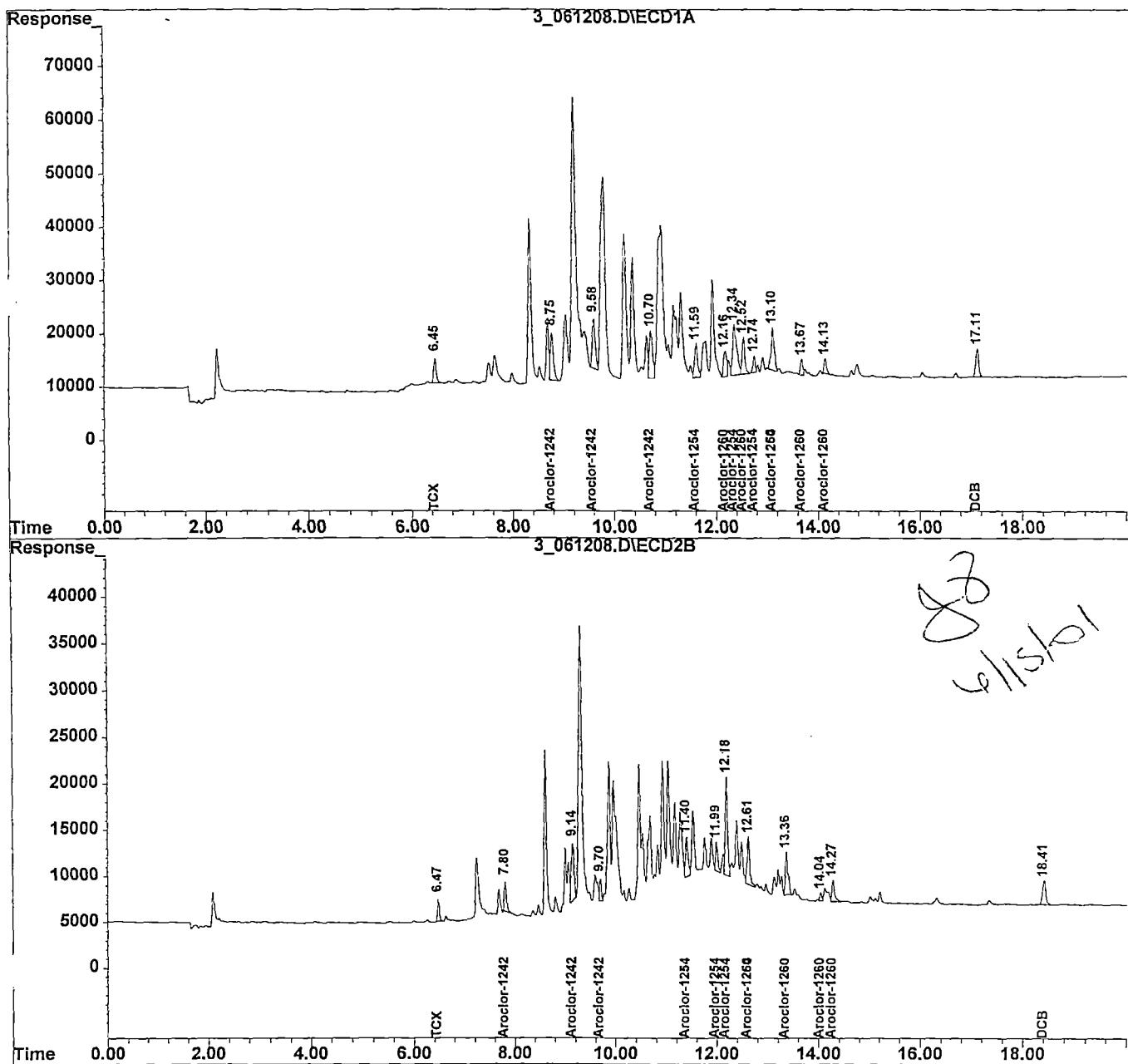
Page 1

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_12_01\3_061208.D\ECD1A.CH Vial: 2
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_12_01\3_061208.D\ECD2B.CH
 Acq On : 12 Jun 2001 12:42 Operator: DDC
 Sample : 46676.24DL *E30J1DL * Inst : HP_03
 Misc : *EPA*30.1G/5.0ML*22 Dilution: 2.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 15 7:42 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_12_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30J2

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.25

Sample wt/vol: 30.6 (g/mL) G Lab File ID: _____

% Moisture: 36 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/10/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q		
		50	U	
12674-11-2-----	Aroclor-1016	50	U	
11104-28-2-----	Aroclor-1221	50	U	
11141-16-5-----	Aroclor-1232	50	U	
53469-21-9-----	Aroclor-1242	2200	E+	3600 D
12672-29-6-----	Aroclor-1248	50	U	
11097-69-1-----	Aroclor-1254	1000	E+	2000 D
11096-82-5-----	Aroclor-1260	430		
Surrogate amount spiked		10.21		

Wifanji Walter
7/13/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060971.D\ECD1A.CH Vial: 71
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060971.D\ECD2B.CH
 Acq On : 10 Jun 2001 17:19 Operator: DDC
 Sample : 46676.25 *E30J2 * Inst : HP_03
 Misc : *EPA*30.6G/5.0ML*36 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 16:21 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S TCX	6.44	6.47	182335	92362	3.625	4.801	#
Spiked Amount	10.212		Recovery	=	35.50%	47.01%	<i>PC</i>
22) S DCB	17.10f	18.40	345619	220432	7.579m	9.497	#
Spiked Amount	10.212		Recovery	=	74.21%	92.99%	<i>b110d</i>

Target Compounds:

7) L4 Aroclor-1242	8.74	7.79	2406985	543399	2509.2 E	1891.6 E	
9) L4 Aroclor-1242 {3}	9.56	9.69	3642364	336721	3009.2 E	1092.6 E#	
10) L4 Aroclor-1242 {4}	10.16f	0.00	6318216	0	4175.5 E	N.D. d	#
11) L4 Aroclor-1242 {5}	0.00	11.01f	0	2036065	N.D.	3651.0 E#	
Sum Aroclor-1242			12367566	2916185	9693.9	6635.3	
Average Aroclor-1242					3231.287	2211.754	
13) L6 Aroclor-1254 {2}	11.58	11.38	1228289	587943	1451.7 E	886.2 E#	
14) L6 Aroclor-1254 {3}	12.31f	11.98	2682207	596305	1560.9 E	972.8 E#	
15) L6 Aroclor-1254 {4}	12.73	12.17	907910	1927153	1266.6 E	1216.2 E	
16) L6 Aroclor-1254 {5}	13.08	12.60	3939522	1058903	1341.5 E	1069.6 E	
Sum Aroclor-1254			8757928	4170304	5620.7	4144.9	
Average Aroclor-1254					1405.163	1036.225	
17) L7 Aroclor-1260	12.14	0.00	1779967	0	708.7	N.D. d	#
18) L7 Aroclor-1260 {2}	12.50f	12.60	1441649	1058903	585.2	725.0	
20) L7 Aroclor-1260 {4}	13.66	14.03	1045624	193458	779.2	209.2	#
21) L7 Aroclor-1260 {5}	14.12f	14.26	1191244	767050	377.6	349.6	
Sum Aroclor-1260			5458484	2019410	1251.4	655.5	
Average Aroclor-1260					612.680	427.925	

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(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

3_060971.D XPCBF09.M Mon Jun 11 16:33:16 2001

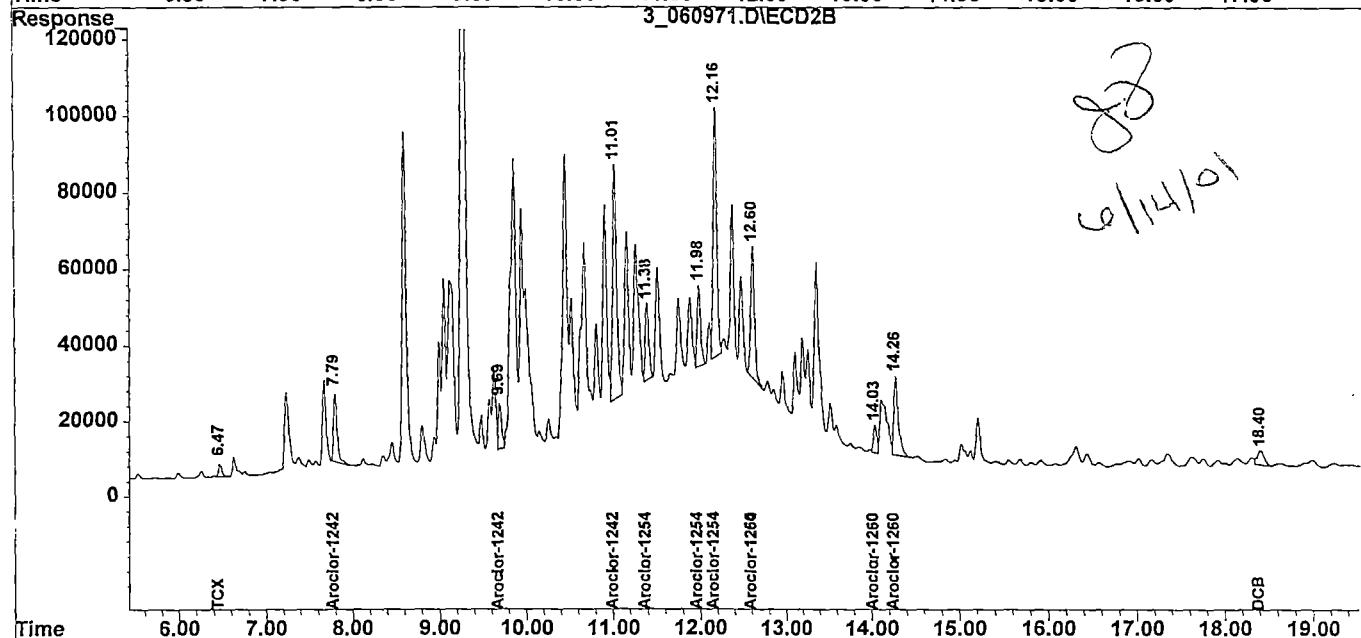
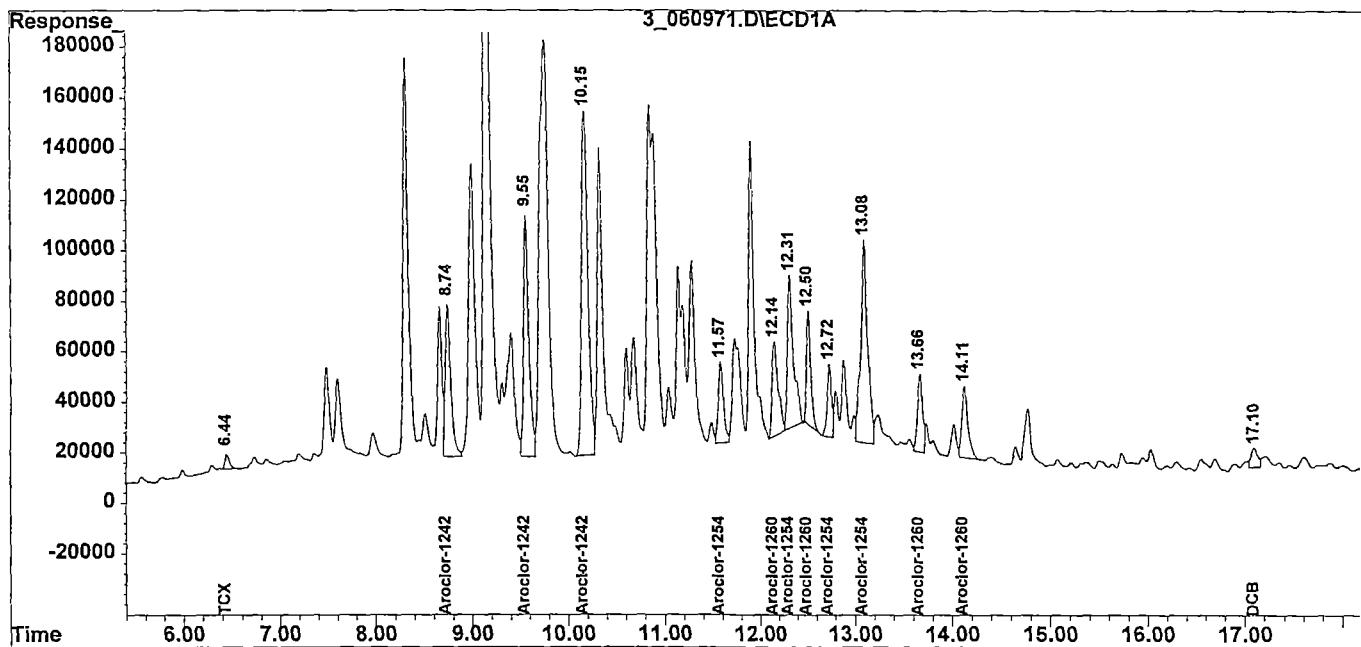
Page 1

Chromatographic Report

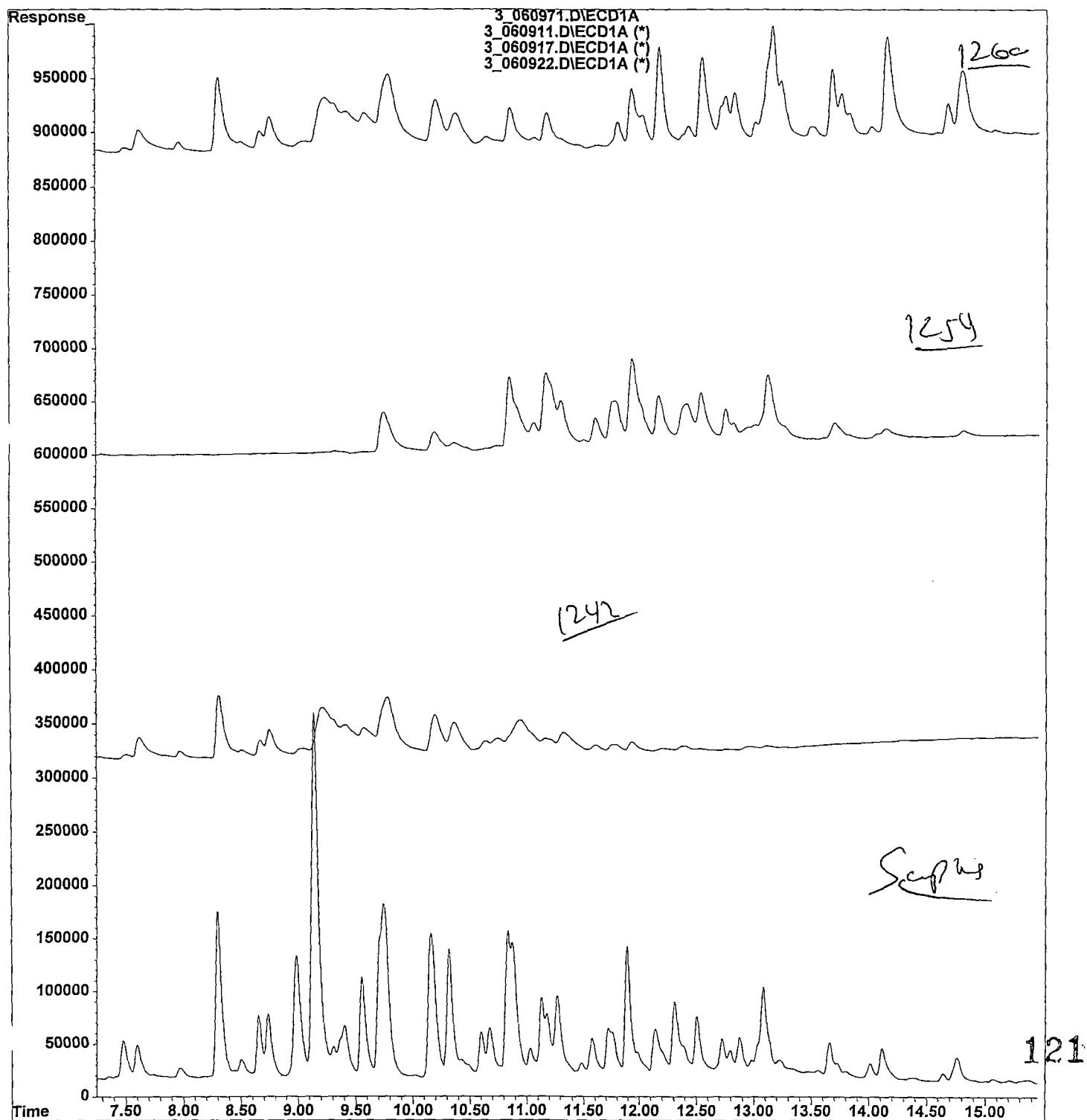
Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060971.D\ECD1A.CH Vial: 71
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060971.D\ECD2B.CH
 Acq On : 10 Jun 2001 17:19 Operator: DDC
 Sample : 46676.25 *E30J2 * Inst : HP_03
 Misc : *EPA*30.6G/5.0ML*36 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 16:21 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Multiple Level Calibration

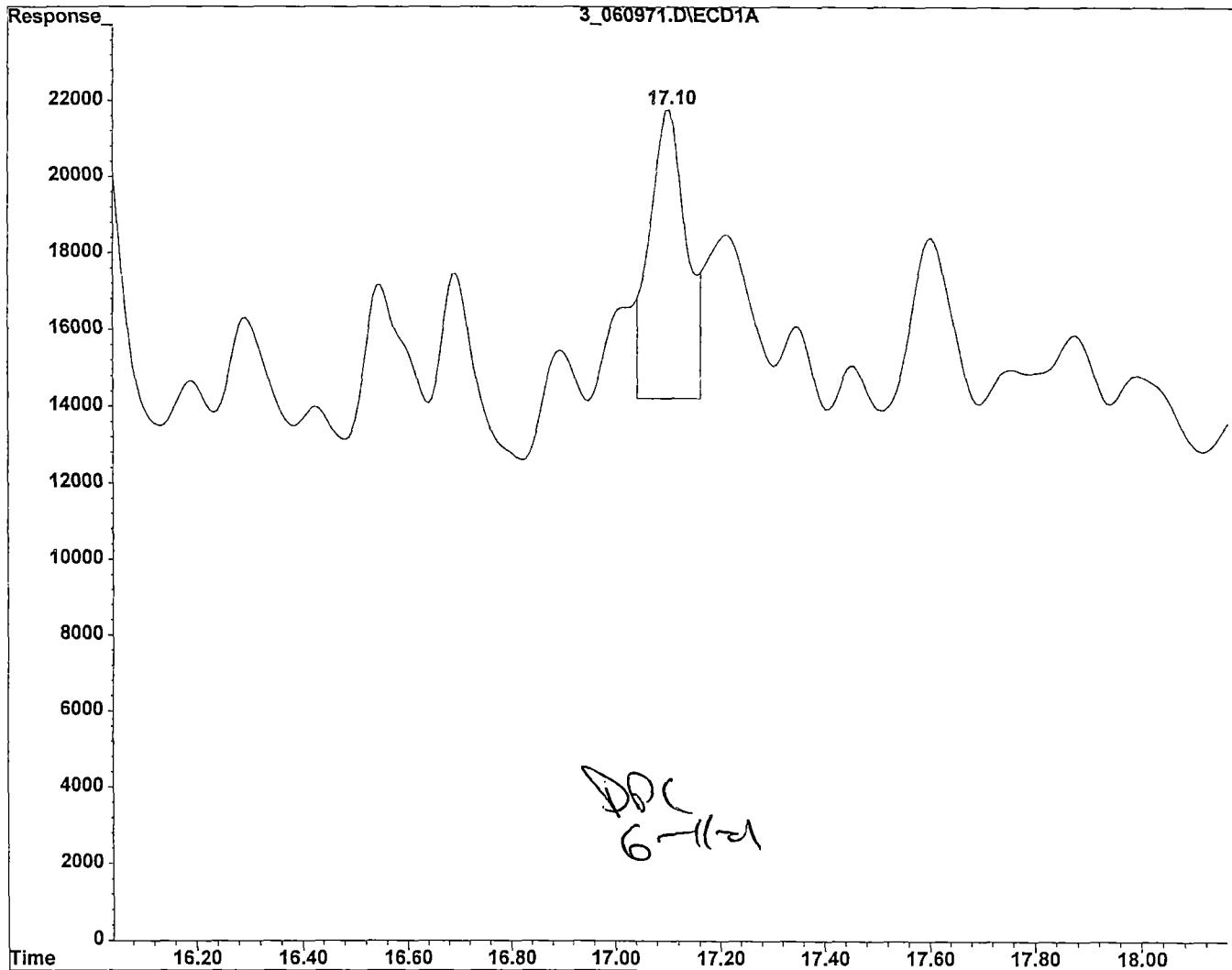
Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



File : F:\HPCHEM\HP\3\DATA\06_09_01\3_060971.D
Operator : DDC
Acquired : 10 Jun 2001 17:19 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 46676.25
Misc Info :
Vial Number: 71



MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060971.D
Date Acquired: 10 Jun 2001 17:19
Inst: HP_03 Operator ID: DDC
Name: 46676.25 *E30J2 *
Misc: *EPA*30.6G/5.0ML*36
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 11 16:21 2001 Quant Results File: XPCBF09.RES



DCB 17.10min area: 345619 m

Integration Time Range: 17.04 - 17.16

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F:\HPCHEM\HP\3\DATA\06_09_01\3_060971.D
Report generated: Mon Jun 11 16:54:45 2001

1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30J2DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.25DL

Sample wt/vol: 30.6 (g/mL) G Lab File ID: _____

% Moisture: 36 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

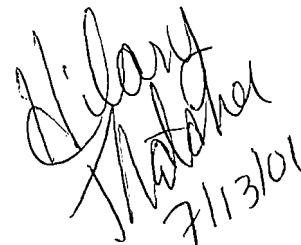
Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/12/01

Injection Volume: 0.5 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/KG	Q
---------	----------	---	-------	---

12674-11-2-----Aroclor-1016		500	U
11104-28-2-----Aroclor-1221		500	U
11141-16-5-----Aroclor-1232		500	U
53469-21-9-----Aroclor-1242		3600	D
12672-29-6-----Aroclor-1248		500	U
11097-69-1-----Aroclor-1254		2000	D
11096-82-5-----Aroclor-1260		740	D
Surrogate amount spiked		10.21	


Shirley Matson
7/13/01

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Quantitation Report

Data File : F:\HPCHEM\HP\3\DATA\06_12_01\3_061209.D\ECD1A.CH Vial: 3
 Acq On : 12 Jun 2001 13:06 Operator: DDC
 Sample : 46676.25DL *E30J2DL * Inst : HP_03
 Misc : *EPA*30.6G/5.0ML*36 Dilution: 10.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\06_12_01\3_061209.D\ECD2B.CH Vial: 3
 Acq On : 12 Jun 2001 13:06 Operator: DDC
 Sample : 46676.25DL Inst : HP_03
 Misc : Dilution: 10.00
 IntFile : events2.e

Quant Time: Jun 13 9:04 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_12_01\XPCBF09.M
 Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S TCX	6.45	6.47	28755	11416	5.717	5.934
Spiked Amount	10.212		Recovery	=	55.98%	58.11%
22) J DCB	17.11	18.40	50186	36320	11.0	15.6
Spiked Amount	10.212		Recovery	=	107.71%	152.76%

Target Compounds:

7) L4 Aroclor-1242	8.76	7.80	380747	49468	3969.2	1722.0
9) L4 Aroclor-1242 {3}	9.58	9.70	606029	83400	5006.7	2706.2
11) L4 Aroclor-1242 {5}	10.71f	11.03f	292470	357217	5230.0	6405.6
Sum Aroclor-1242			1279246	490085	14206.0	10833.8
Average Aroclor-1242					4735.322	3611.262

13) L6 Aroclor-1254 {2}	11.59	11.40	226360	137654	2675.3	2074.9
14) L6 Aroclor-1254 {3}	12.34	11.99	515081	97671	2997.4	1593.5
15) L6 Aroclor-1254 {4}	12.74	12.18	131064	368123	1828.5	2323.2
16) L6 Aroclor-1254 {5}	13.10	12.61	487139	205427	1658.8	2075.0
Sum Aroclor-1254			1359644	808876	9160.0	8066.6
Average Aroclor-1254					2290.000	2016.656

17) L7 Aroclor-1260	12.15	0.00	313724	0	1249.2	N.D. d
18) L7 Aroclor-1260 {2}	12.52	12.61	332100	205427	1348.2	1406.5
20) L7 Aroclor-1260 {4}	13.67	14.04	133954	29944	998.2	323.8
21) L7 Aroclor-1260 {5}	14.13	14.27	119973	108105	380.3	492.7
Sum Aroclor-1260			899751	343476	20301.3	11351.0
Average Aroclor-1260					993.950	740.995

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(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

3_061209.D XPCBF09.M Wed Jun 13 09:05:31 2001

Page 1

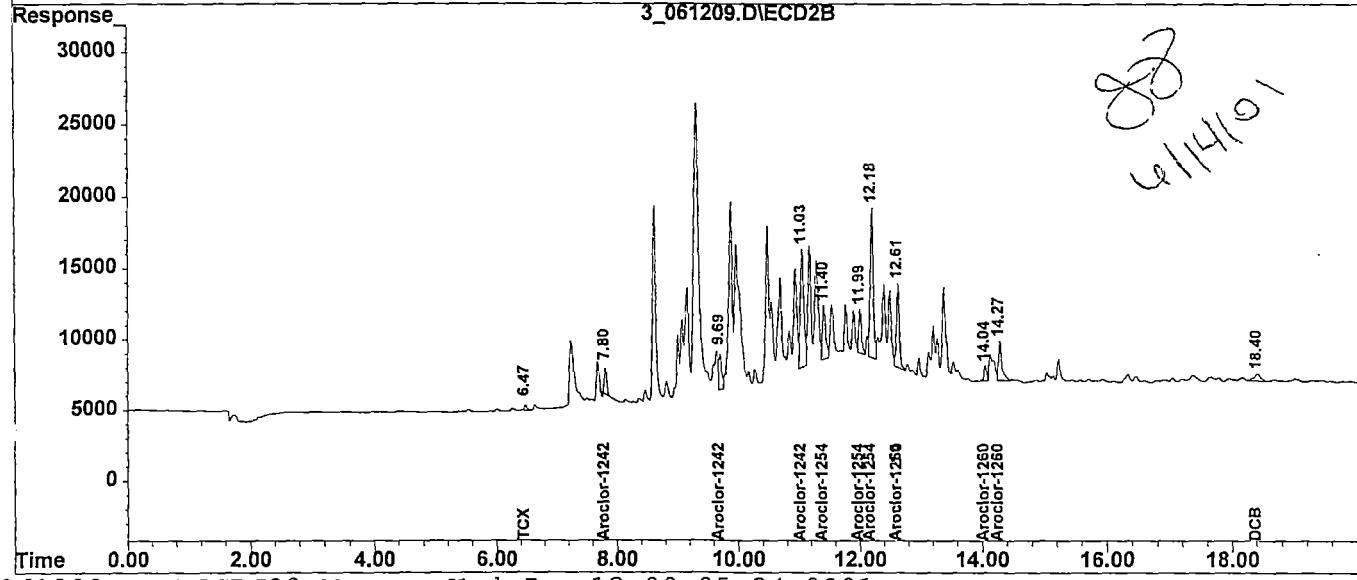
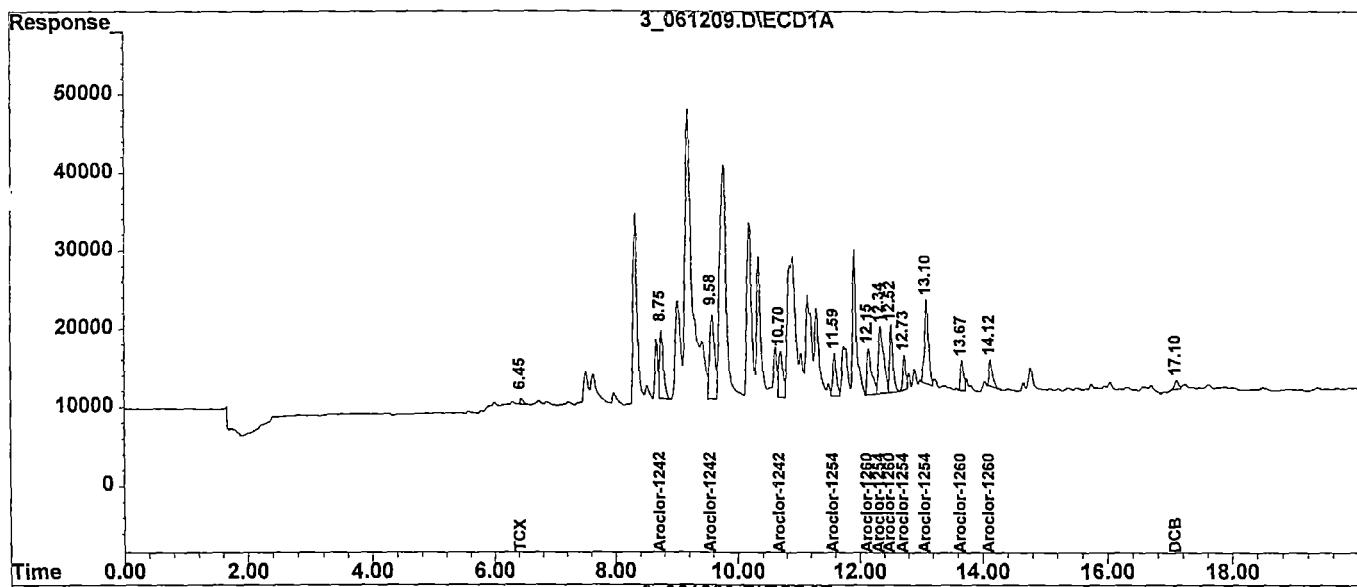
Chromatographic Report

Data File : F:\HPCHEM\HP\3\DATA\06_12_01\3_061209.D\ECD1A.CH Vial: 3
 Acq On : 12 Jun 2001 13:06 Operator: DDC
 Sample : 46676.25DL *E30J2DL * Inst : HP_03
 Misc : *EPA*30.6G/5.0ML*36 Dilution: 10.00
 IntFile : events.e

Data File : F:\HPCHEM\HP\3\DATA\06_12_01\3_061209.D\ECD2B.CH Vial: 3
 Acq On : 12 Jun 2001 13:06 Operator: DDC
 Sample : 46676.25DL Inst : HP_03
 Misc : Dilution: 10.00
 IntFile : events2.e
 Quant Time: Jun 13 9:04 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_12_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30J3

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.26

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 34 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/10/01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		
		(ug/L or ug/Kg)	UG/KG	Q
12674-11-2-----	Aroclor-1016	50	U	
11104-28-2-----	Aroclor-1221	50	U	
11141-16-5-----	Aroclor-1232	50	U	
53469-21-9-----	Aroclor-1242	2600	E	3700 D
12672-29-6-----	Aroclor-1248	50	U	
11097-69-1-----	Aroclor-1254	660	E	1200 D
11096-82-5-----	Aroclor-1260	290		
Surrogate amount spiked		10.03		

TB
7/16/01*Lilayn Hatchel*
7/13/01

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060972.D\ECD1A.CH Vial: 72
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060972.D\ECD2B.CH
 Acq On : 10 Jun 2001 17:44 Operator: DDC
 Sample : 46676.26 *E30J3 * Inst : HP_03
 Misc : *EPA*30.2G/5.0ML*34 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 16:23 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	6.44	6.47	252533	127398	4.933	6.506	#
	Spiked Amount	10.034			Recovery	=	49.16%	DC 64.84%
22)	S DCB	17.10	18.40	582803	218791	12.6m E#(1)	9.262m	# DC 6-1/2
	Spiked Amount	10.034			Recovery	=	125.57%	92.31%

Target Compounds:

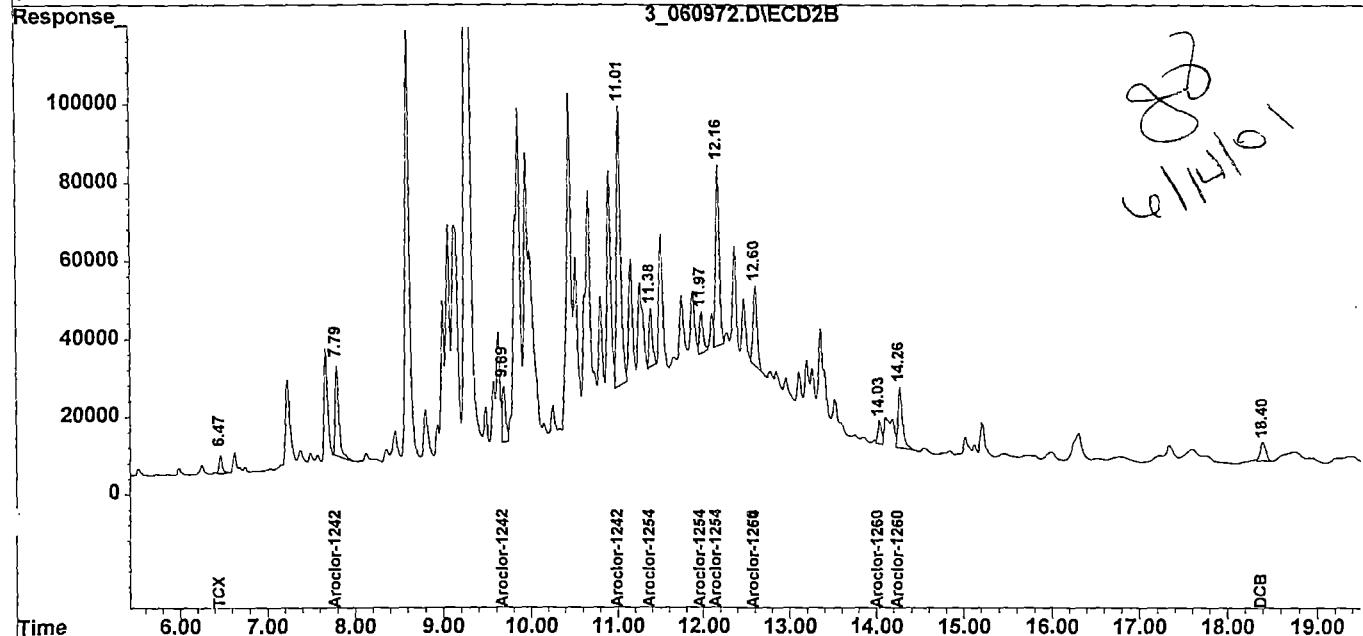
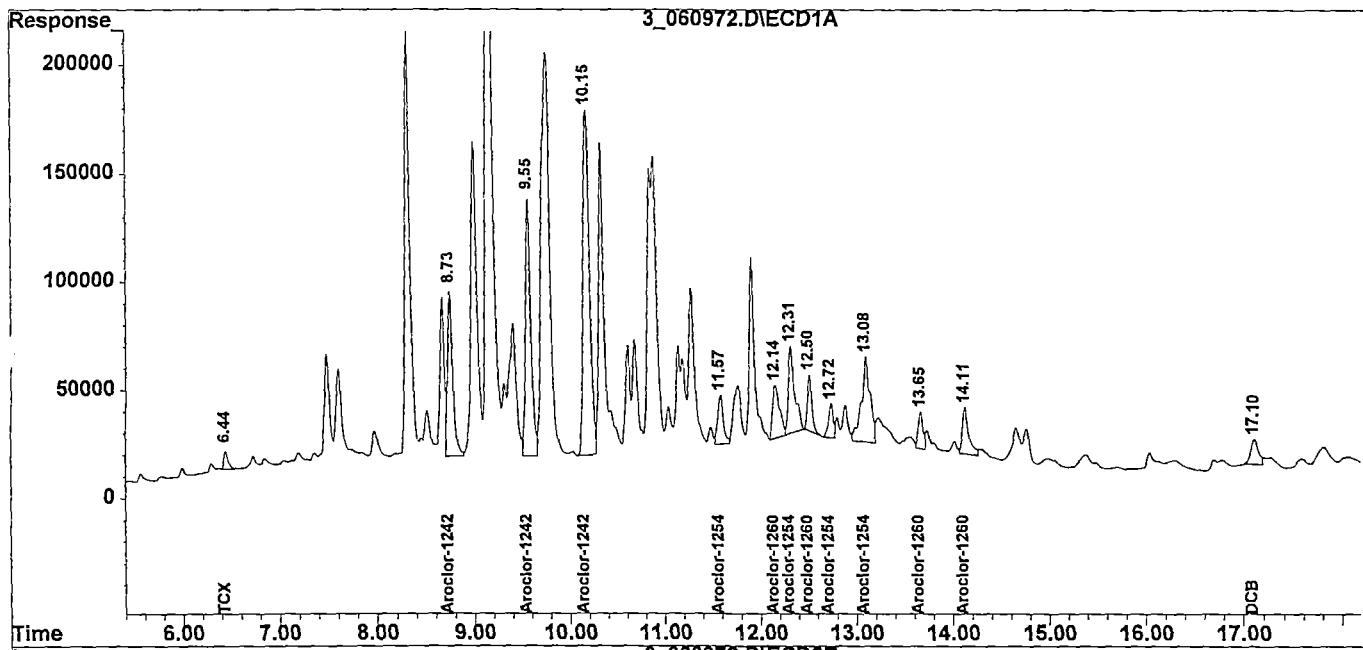
7)	Aroclor-1242	8.74	7.79	2966618	688619	3038.6 E	2355.3 E	
9)	Aroclor-1242 {3}	9.55	9.69	4488770	404452	3643.7 E	1289.5 E#	
10)	L4 Aroclor-1242 {4}	10.16f	0.00	7405085	0	4808.3 E	N.D. d	#
11)	L4 Aroclor-1242 {5}	0.00	11.01f	0	2391842	N.D.	4214.1 E#	
	Sum Aroclor-1242			14860474	3484913	11490.6	7858.9	
	Average Aroclor-1242					3830.205	2619.628	
13)	L6 Aroclor-1254 {2}	11.58	11.38	900790	434327	1046.0 E	643.2 E#	
14)	L6 Aroclor-1254 {3}	12.31f	11.98	1814626	309441	1037.6 E	496.0	#
15)	L6 Aroclor-1254 {4}	12.73	12.17	527587	1379333	723.2	855.3 E	
16)	L6 Aroclor-1254 {5}	13.08	12.60	2488650	659240	832.6 E	654.3	
	Sum Aroclor-1254			5731653	2782341	3639.4	2648.8	
	Average Aroclor-1254					909.852	662.211	
17)	L7 Aroclor-1260	12.14	0.00	1249890	0	489.0	N.D. d	#
18)	L7 Aroclor-1260 {2}	12.50f	12.60	815528	659240	325.3	443.5	#
20)	L7 Aroclor-1260 {4}	13.66	14.03	577159	161629	422.6	171.7	#
21)	L7 Aroclor-1260 {5}	14.12f	14.26	974410	570004	303.4	255.2	
	Sum Aroclor-1260			3616988	1390872	772.8	436.7	
	Average Aroclor-1260					385.074	290.149	

Chromatographic Report

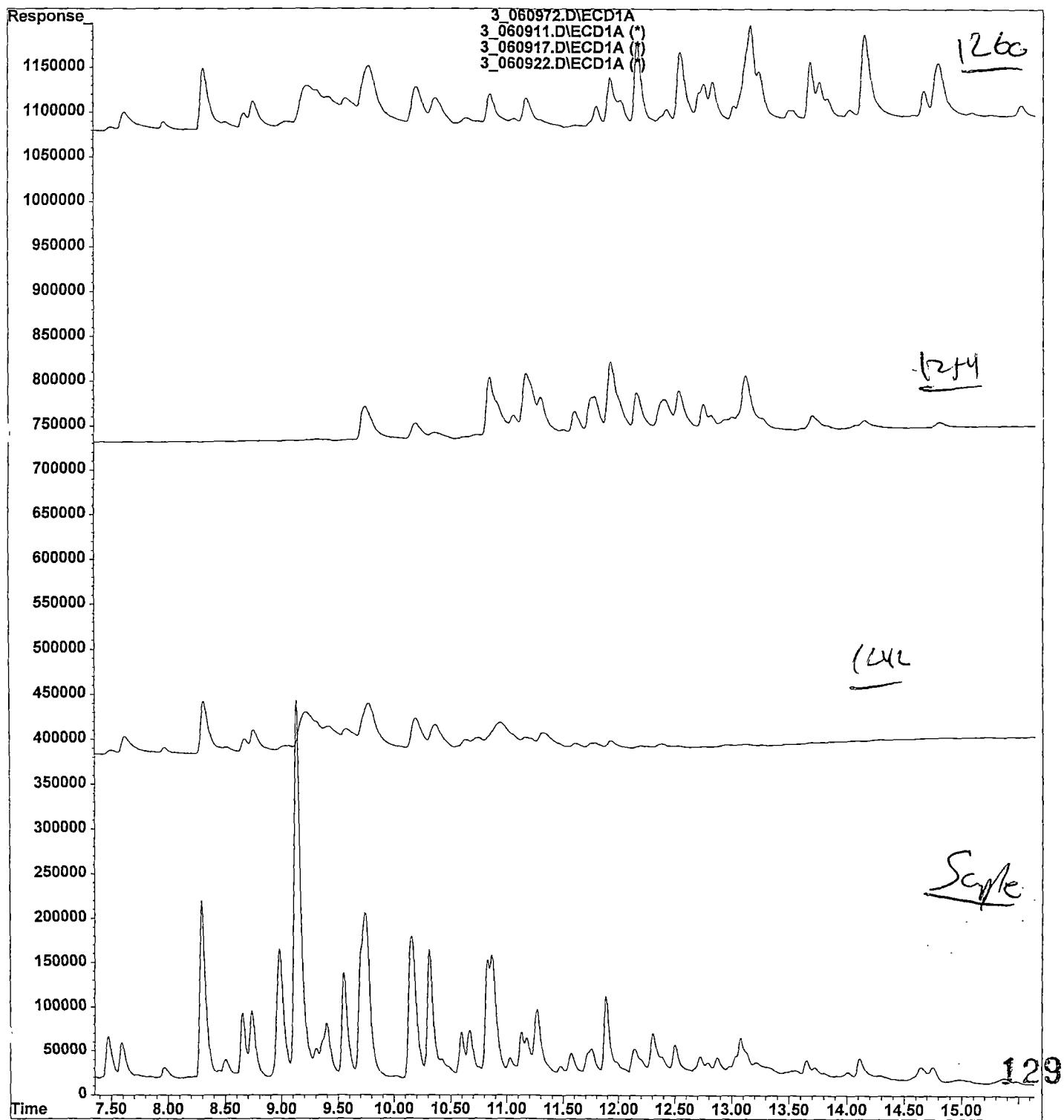
Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060972.D\ECD1A.CH Vial: 72
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060972.D\ECD2B.CH
 Acq On : 10 Jun 2001 17:44 Operator: DDC
 Sample : 46676.26 *E30J3 * Inst : HP_03
 Misc : *EPA*30.2G/5.0ML*34 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 11 16:23 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Multiple Level Calibration

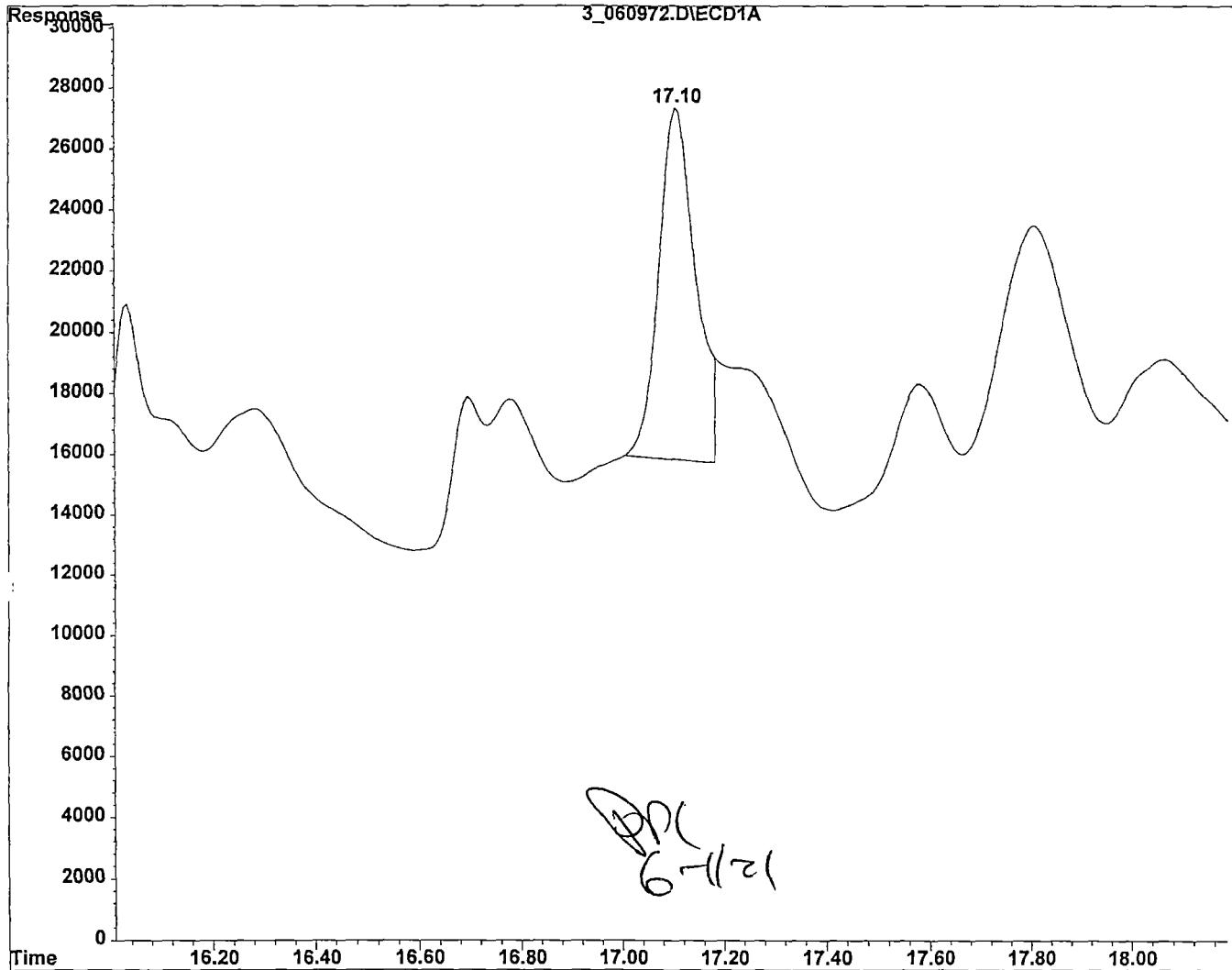
Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



File : F:\HPCHEM\HP\3\DATA\06_09_01\3_060972.D
Operator : DDC
Acquired : 10 Jun 2001 17:44 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 46676.26
Misc Info :
Vial Number: 72



MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060972.D
Date Acquired: 10 Jun 2001 17:44
Inst: HP_03 Operator ID: DDC
Name: 46676.26 *E30J3 *
Misc: *EPA*30.2G/5.0ML*34
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 11 16:23 2001 Quant Results File: XPCBF09.RES



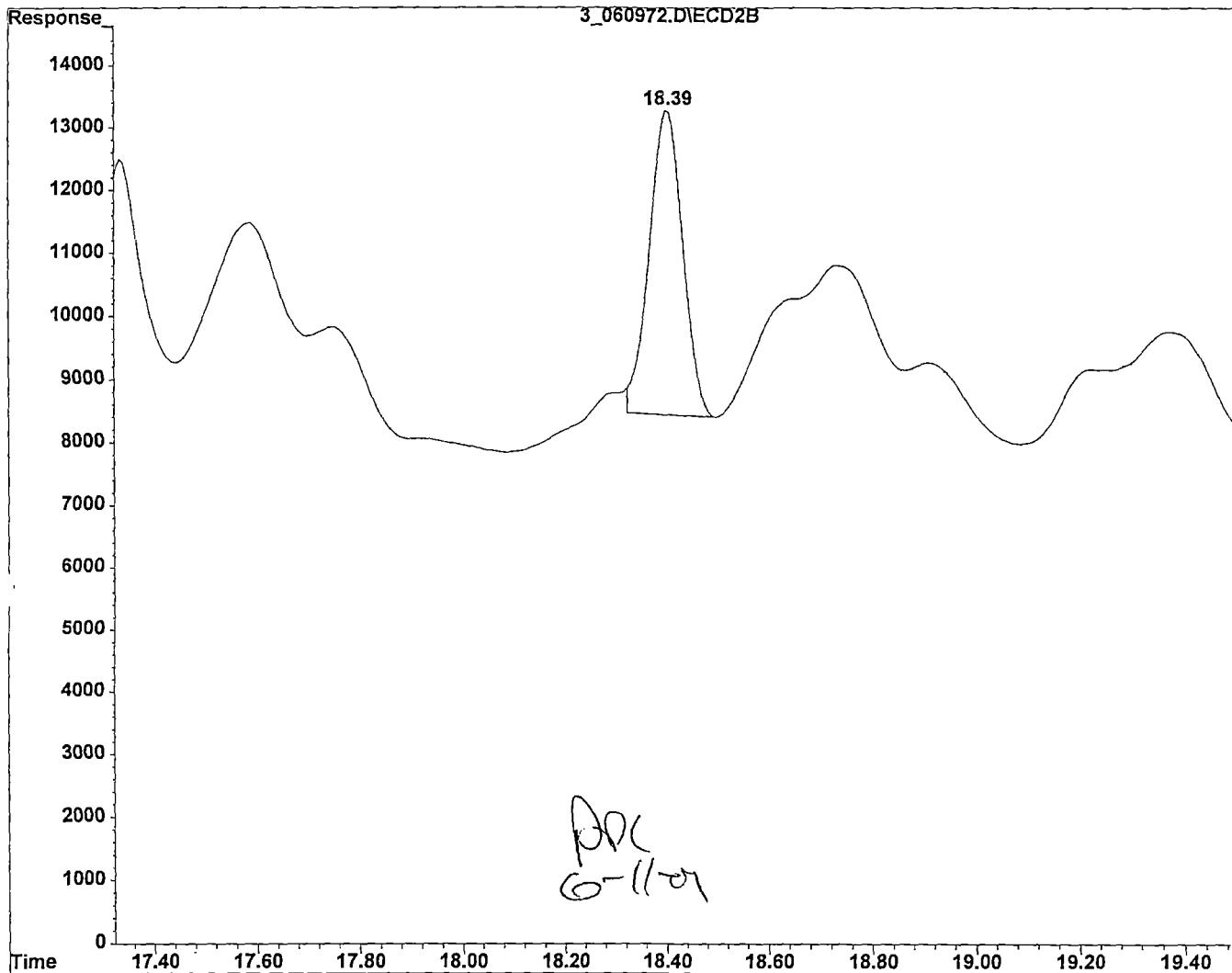
DCB 17.10min area: 582803 m

Integration Time Range: 17.01 - 17.18

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F:\HPCHEM\HP\3\DATA\06_09_01\3_060972.D
Report generated: Mon Jun 11 16:54:46 2001

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060972.D
Date Acquired: 10 Jun 2001 17:44
Inst: HP_03 Operator ID: DDC
Name: 46676.26 *E30J3 *
Misc: *EPA*30.2G/5.0ML*34
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 11 16:23 2001 Quant Results File: XPCBF09.RES



DCB #2 18.40min area: 218791 m

Integration Time Range: 18.32 - 18.48

1D
AROCLOL ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30J3DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.26DL

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 34 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/12/01

Injection Volume: 0.5 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
12674-11-2-----	Aroclor-1016	500	U
11104-28-2-----	Aroclor-1221	500	U
11141-16-5-----	Aroclor-1232	500	U
53469-21-9-----	Aroclor-1242	3700	D
12672-29-6-----	Aroclor-1248	500	U
11097-69-1-----	Aroclor-1254	1200	D
11096-82-5-----	Aroclor-1260	560	D
Surrogate amount spiked		10.03	

*J. Gary
Wade
7/13/01*

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Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_12_01\3_061210.D\ECD1A.CH Vial: 4
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_12_01\3_061210.D\ECD2B.CH
 \cq On : 12 Jun 2001 13:31 Operator: DDC
 Sample : 46676.26DL *E30J3DL * Inst : HP_03
 Misc : *EPA*30.2G/5.0ML*34 Dilution: 10.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 15 7:46 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_12_01\XPCBF09.M
 Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1)	S TCX	6.45	6.47	38453	16614	7.512	8.484	
	Spiked Amount	10.034		Recovery	=	74.86%	84.55%	
22)	S DCB	17.10	18.40	93557	34164	20.2	14.5	#
	Spiked Amount	10.034		Recovery	=	201.31%	144.51%	

Target Compounds:

7)	\ Aroclor-1242	8.75	7.80	506271	74948	5185.6	2563.4	#
9)	\4 Aroclor-1242 {3}	9.58	9.69	542825	71840	4406.3	2290.4	#
11)	L4 Aroclor-1242 {5}	10.70f	11.03f	347223	348868	6100.7	6146.6	
	Sum Aroclor-1242			1396319	495656	15692.6	11000.5	
	Average Aroclor-1242					5230.870	3666.822	

13)	L6 Aroclor-1254 {2}	11.59	11.40	183747	79111	2133.7	1171.6	#
14)	L6 Aroclor-1254 {3}	12.34	11.99	388402	47294	2220.8	758.1	#
15)	L6 Aroclor-1254 {4}	12.73	12.18	77621	269182	1064.0	1669.1	#
16)	L6 Aroclor-1254 {5}	13.09	12.61	297764	131025	996.2	1300.4	#
	Sum Aroclor-1254			947534	526612	6414.7	4899.3	
	Average Aroclor-1254					1603.686	1224.820	

17)	L7 Aroclor-1260	12.15	0.00	149548	0	585.1	N.D. d	#
18)	L7 Aroclor-1260 {2}	12.52	12.61	204302	131025	814.9	881.4	
20)	L7 Aroclor-1260 {4}	13.66	14.04	62845	36756	460.1	390.5	
21)	L7 Aroclor-1260 {5}	14.12	14.27	146470	92020	456.1	412.1	
	Sum Aroclor-1260			563165	259802	11620.6	8448.7	
	Average Aroclor-1260					579.056	561.334	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

3_061210.D XPCBF09.M Fri Jun 15 07:46:58 2001

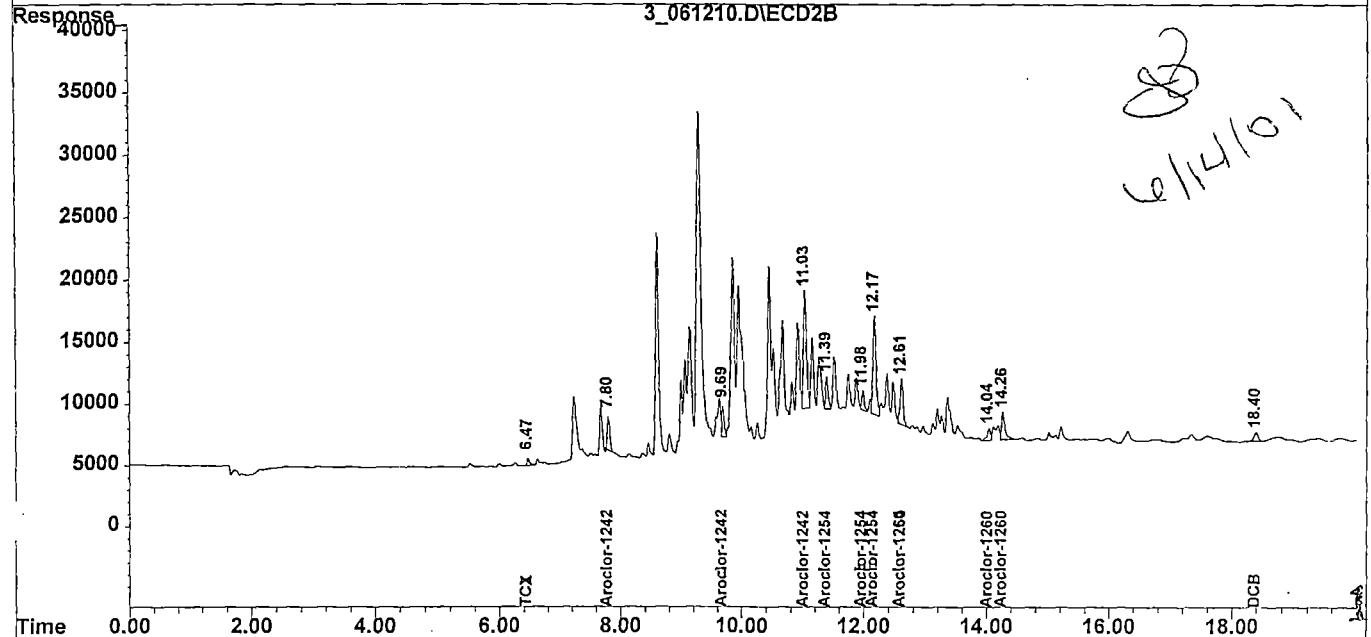
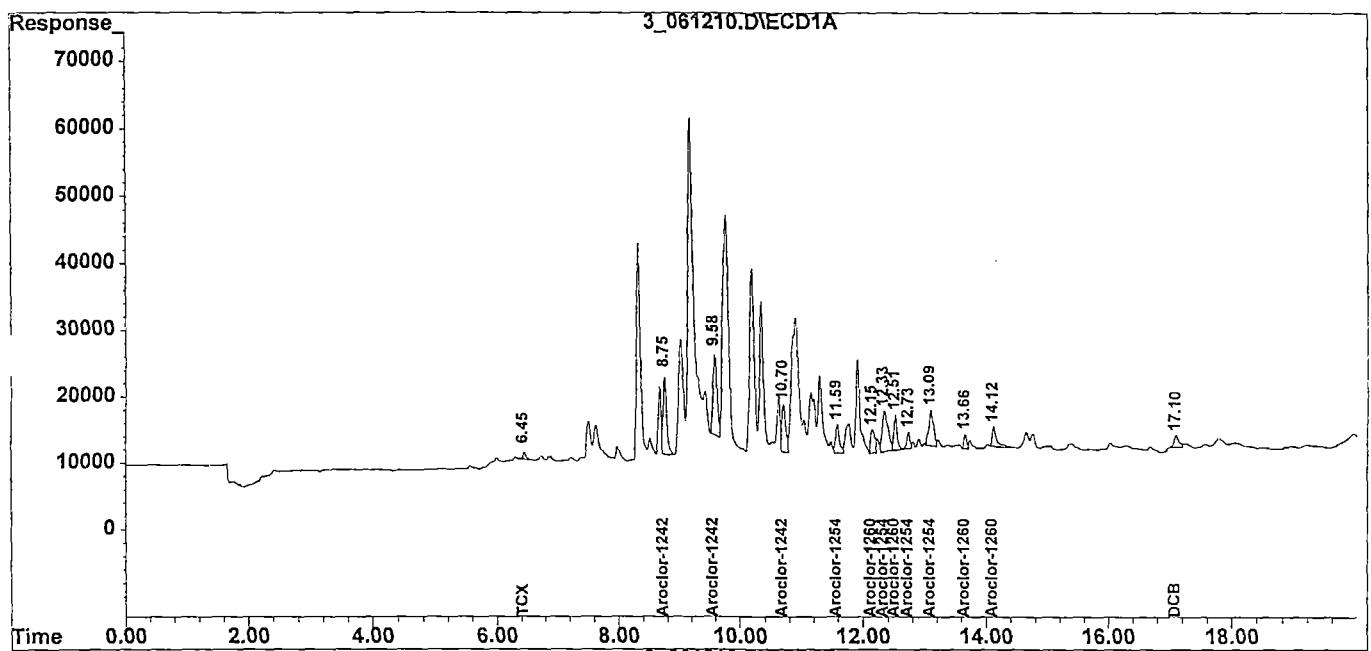
133

Chromatographic Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_12_01\3_061210.D\ECD1A.CH Vial: 4
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_12_01\3_061210.D\ECD2B.CH
 Acq On : 12 Jun 2001 13:31 Operator: DDC
 Sample : 46676.26DL *E30J3DL * Inst : HP_03
 Misc : *EPA*30.2G/5.0ML*34 Dilution: 10.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 15 7:46 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_12_01\XPCBF09.M
 Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\3\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Multiple Level Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B



1D
AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30J4

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Matrix: (soil/water) SOIL Lab Sample ID: 46676.27

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 26 decanted: (Y/N) _____ Date Received: 06/02/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/02/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/10/01

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q		
12674-11-2-----	Aroclor-1016	44	U	
11104-28-2-----	Aroclor-1221	44	U	
11141-16-5-----	Aroclor-1232	44	U	
53469-21-9-----	Aroclor-1242	67		
12672-29-6-----	Aroclor-1248	44	U	
11097-69-1-----	Aroclor-1254	63		
11096-82-5-----	Aroclor-1260	29	JP	
Surrogate amount spiked		9.01		

Quantitation Report

Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D\ECD1A.CH Vial: 73
 Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D\ECD2B.CH
 Acq On : 10 Jun 2001 18:08 Operator: DDC
 Sample : 46676.27 *E30J4 * Inst : HP_03
 Misc : *EPA*30G/5.0ML*26 Dilution: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e
 Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
 Title-Path : PCB/TOXAPHEN - F:\HPCHEM\HP\7\DATA\06_09_01\
 Last Update : Sun Jun 10 08:46:47 2001
 Response via : Initial Calibration

Volume Inj. : 0.5uL
 Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
 Signal #1 Info : .32 mm Signal #2 Info : .32 mm
 Signal #1 Inst : HP_03A Signal #2 Inst : HP_03B

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/Kg	ug/Kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds:

1) S TCX	6.45	6.47	289000	123888	5.069	5.680
Spiked Amount	9.009		Recovery	=	56.27%	63.05% <i>QMC</i>
22) S DCB	17.11	18.40	354359	157727	6.855	5.995m <i>6-14z</i>
Spiked Amount	9.009		Recovery	=	76.09%	66.54%

Target Compounds:

8) L4 Aroclor-1242 {2}	0.00	9.14	0	37244	N.D. d	98.6 #
9) L4 Aroclor-1242 {3}	9.56	9.69	57693	10709	42.0	30.7 #
10) L4 Aroclor-1242 {4}	10.17	10.67	196308	21045	114.4	46.6 #
11) L4 Aroclor-1242 {5}	10.70f	11.03f	30003	57293	47.3	90.6 #
Sum Aroclor-1242			284004	126292	203.8	266.5
Average Aroclor-1242					67.941	66.619

12) L6 Aroclor-1254	9.75	10.45	352915	60150	166.2	193.9
13) L6 Aroclor-1254 {2}	11.60	11.39	104869	17804	109.3 <i>QMC</i>	23.7m #
14) L6 Aroclor-1254 {3}	12.32f	11.99	97412	19304	50.0m <i>6-14z</i>	27.8m #
15) L6 Aroclor-1254 {4}	12.73	12.17	28188	74452	34.7m	41.4m
16) L6 Aroclor-1254 {5}	0.00	12.60	0	29392	N.D. d	26.2m #
Sum Aroclor-1254			583383	201102	360.3	313.0
Average Aroclor-1254					90.067	62.601

17) L7 Aroclor-1260	12.15	12.46	58272	31984	20.5m	20.5m
18) L7 Aroclor-1260 {2}	12.51	12.60	55158	38604	19.8	23.3m
19) L7 Aroclor-1260 {3}	14.14f	0.00	534280	0	119.2m	N.D. #
20) L7 Aroclor-1260 {4}	0.00	14.04	0	49036	N.D.	46.8 #
21) L7 Aroclor-1260 {5}	14.14	14.26	649011	67198	181.5	27.0 #
Sum Aroclor-1260			1296721	186822	153.6	53.0
Average Aroclor-1260					85.227	29.405

136

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

(E)= > Highest cal. std. (d)=compound deleted (H) Dil. < med. std

3_060973.D XPCBF09.M Thu Jun 14 15:02:44 2001

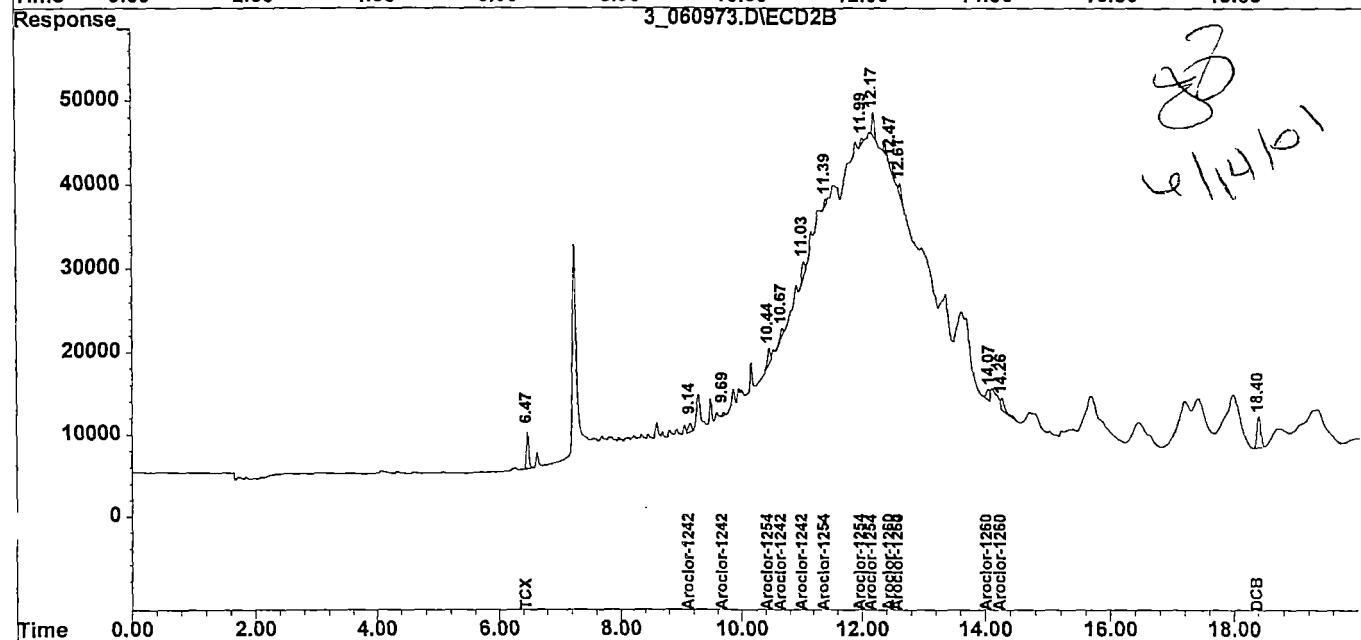
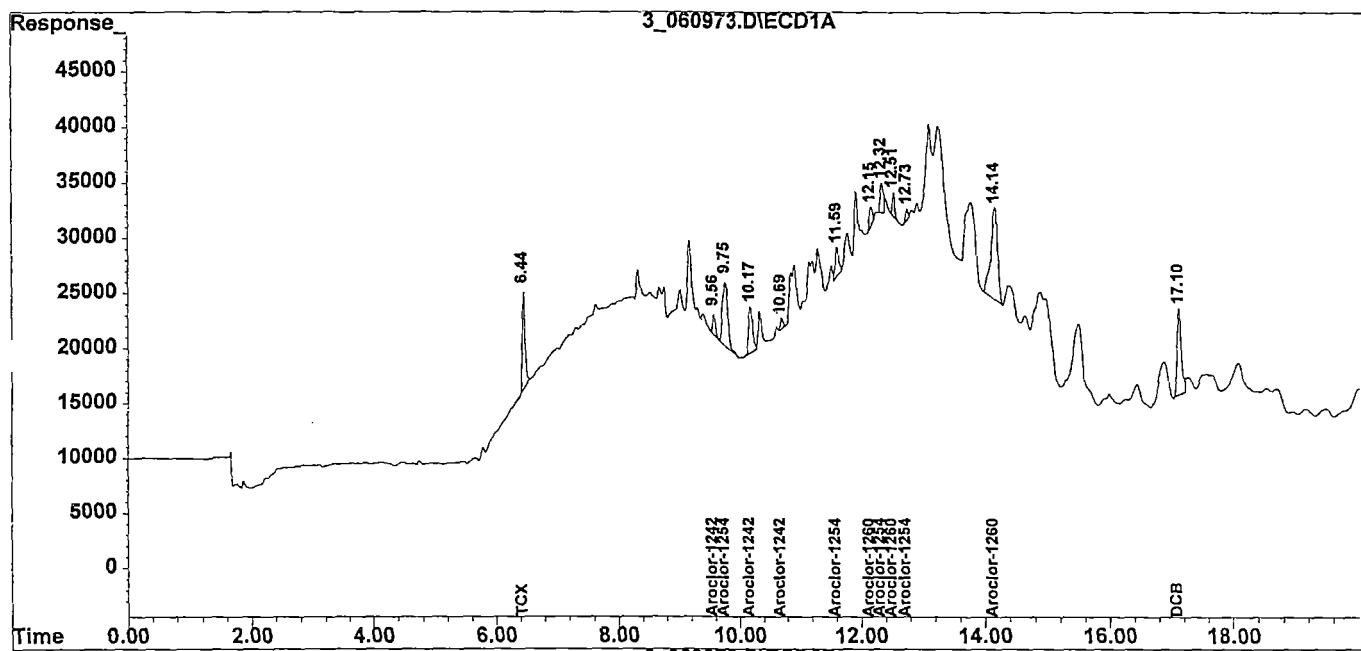
Page 1

Chromatographic Report

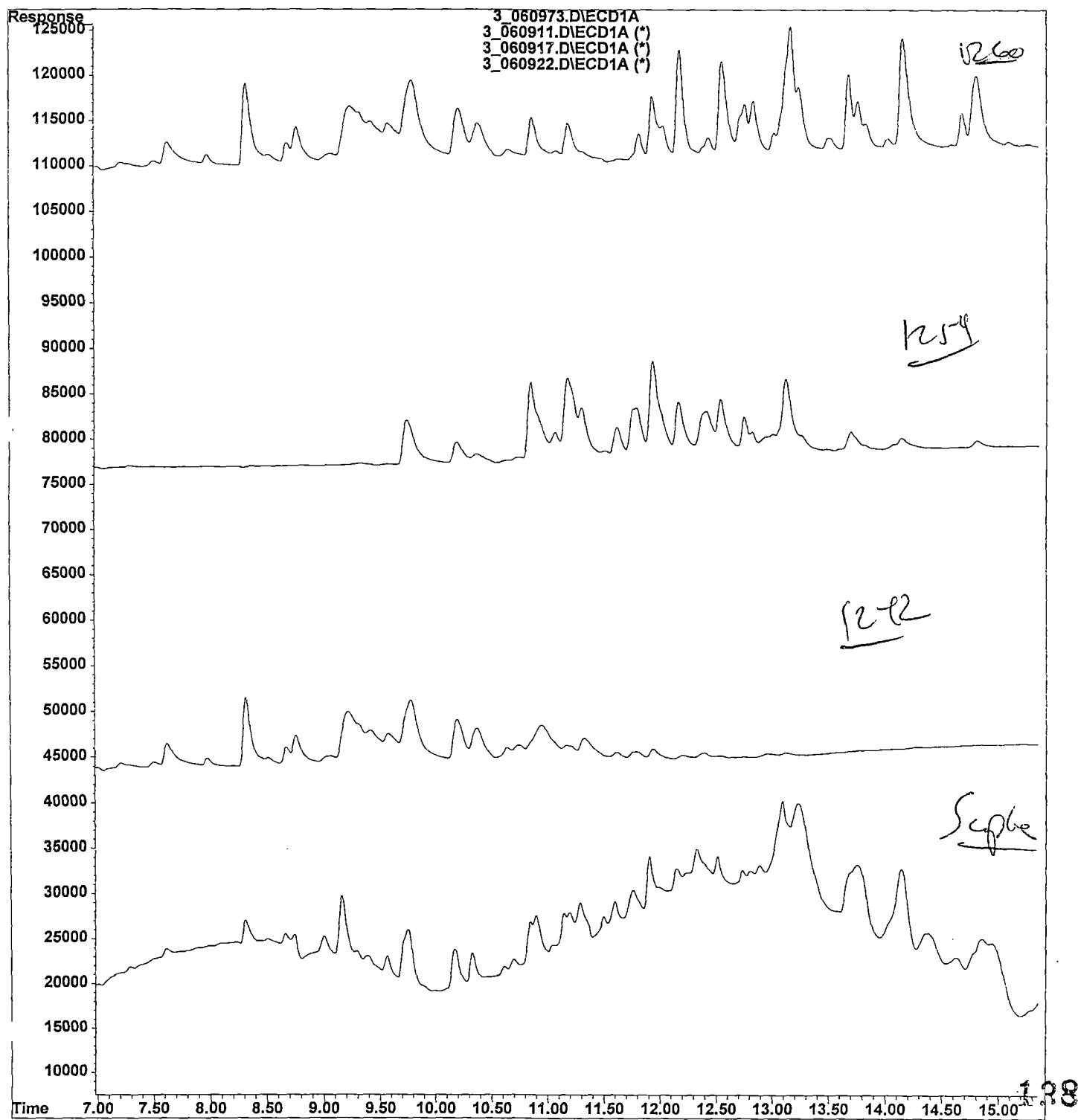
Signal #1 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D\ECD1A.CH Vial: 73
Signal #2 : F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D\ECD2B.CH
Acq On : 10 Jun 2001 18:08 Operator: DDC
Sample : 46676.27 *E30J4 * Inst : HP_03
Misc : *EPA*30G/5.0ML*26 Dilution: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES

Method : F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title-Path : PCB/TOXAPHENE - F:\HPCHEM\HP\7\DATA\06_09_01\
Last Update : Sun Jun 10 08:46:47 2001
Response via : Multiple Level Calibration

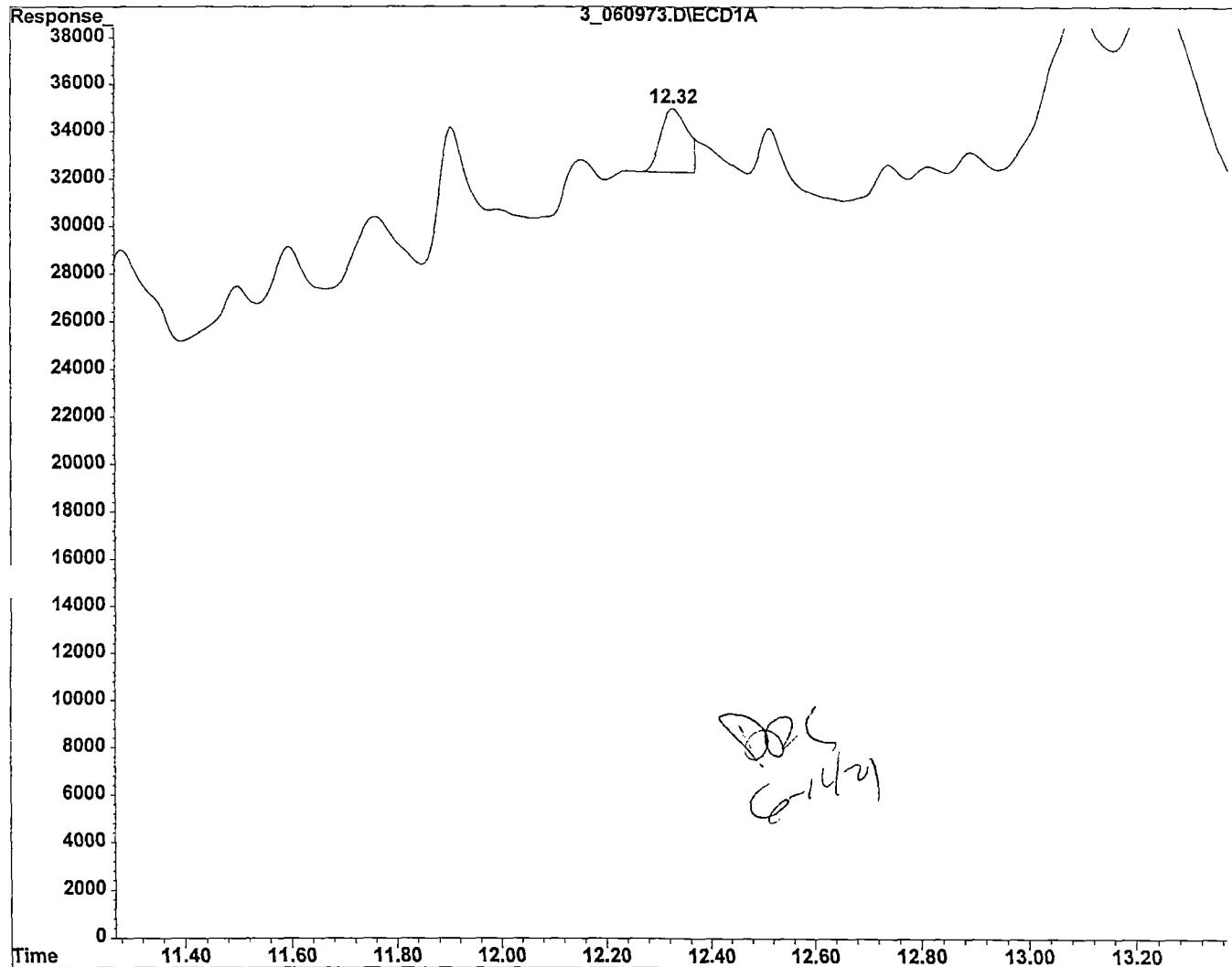
Volume Inj. : 0.5uL
Signal #1 Phase : DB-17 Signal #2 Phase: DB-1701
Signal #1 Info : .32 mm Signal #2 Info : .32 mm
Signal #1 Inst : HP 03A Signal #2 Inst : HP 03B



File : F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Operator : DDC
Acquired : 10 Jun 2001 18:08 using AcqMethod OLM03.M
Instrument : HP_03
Sample Name: 46676.27 *E30J4 *
Misc Info : *EPA*30G/5.0ML*26
Vial Number: 73



MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP 03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES



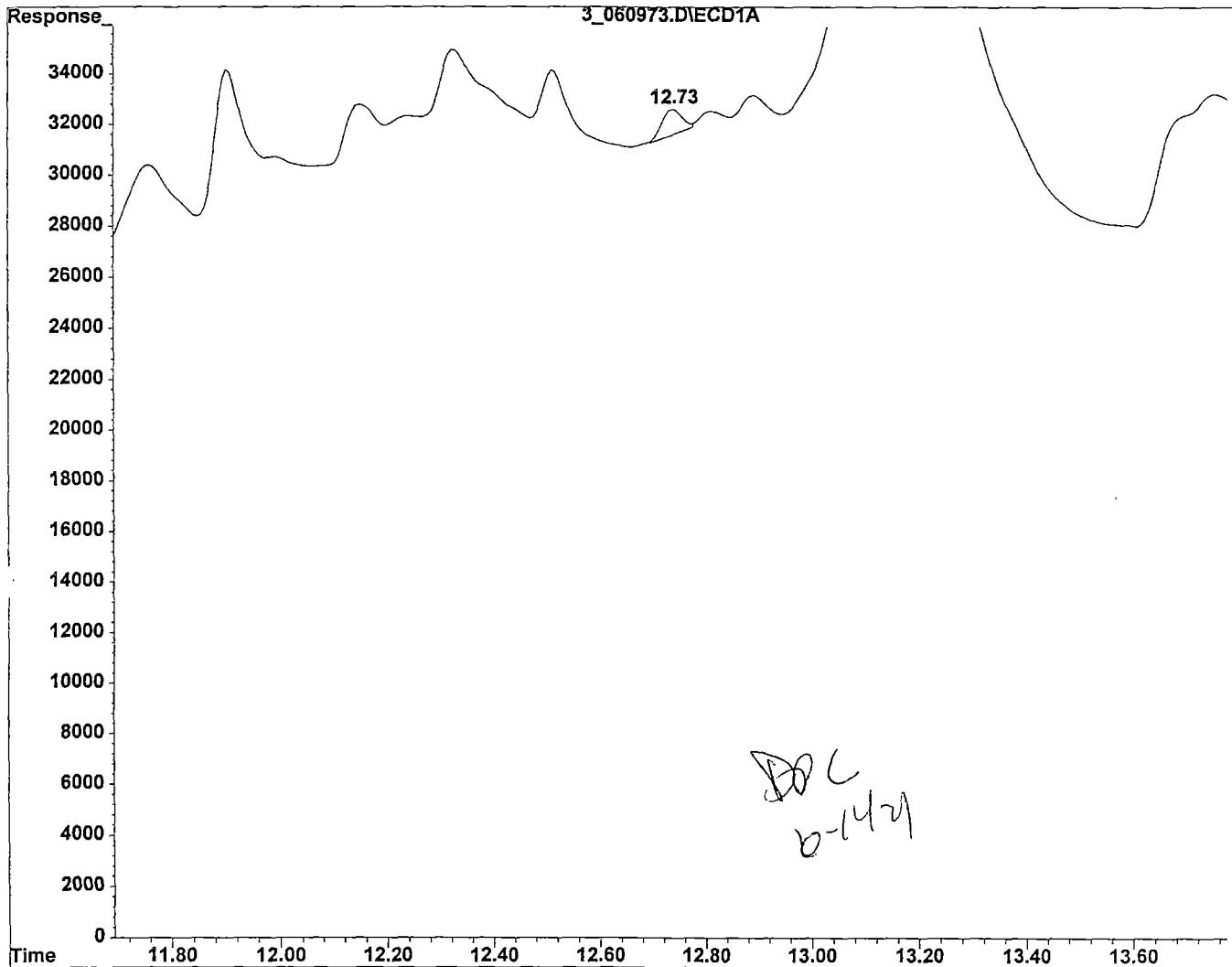
Aroclor-1254 {3} 12.32min area: 97412 m

Integration Time Range: 12.27 - 12.37

139

F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Report generated: Thu Jun 14 14:56:44 2001

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP_03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES



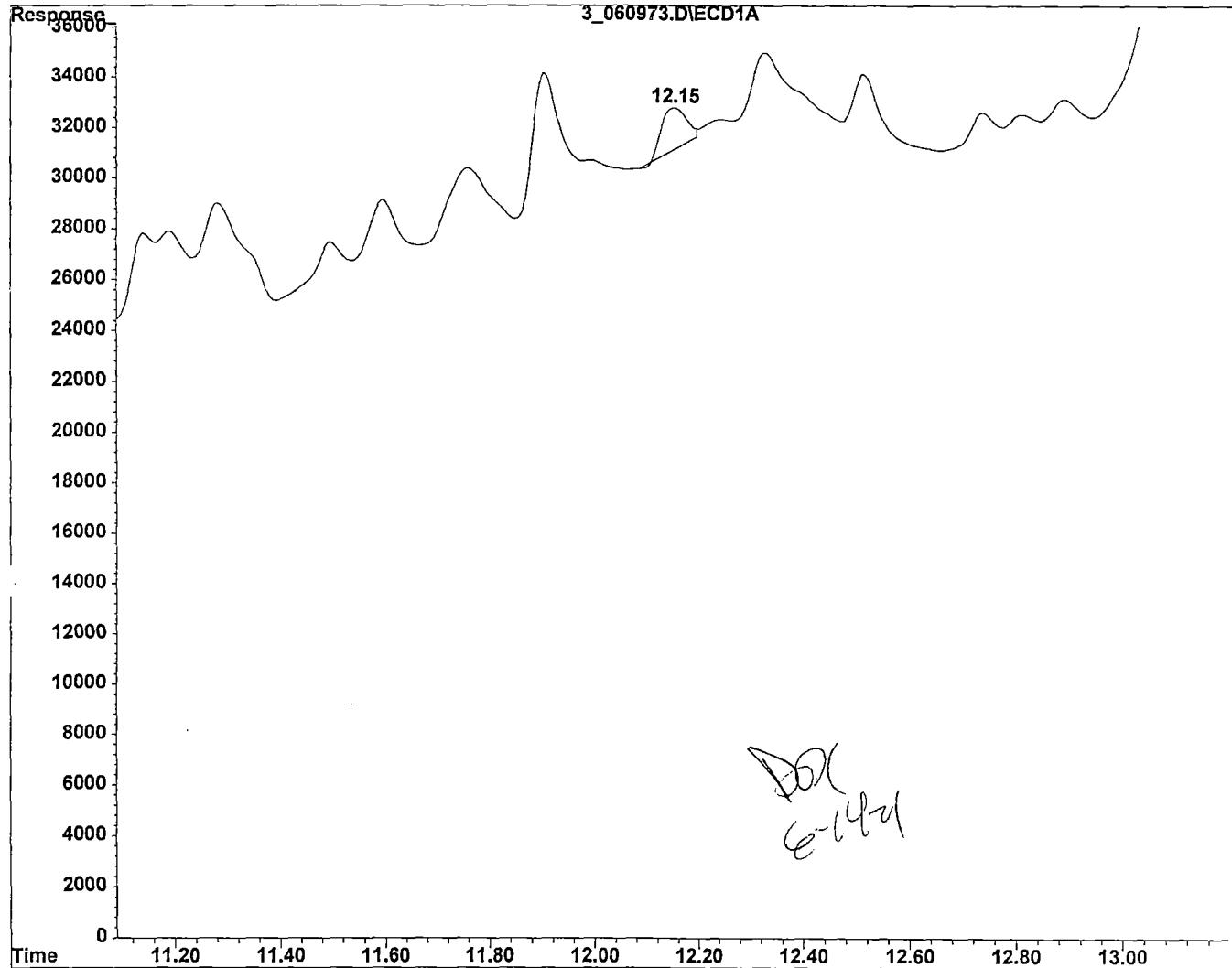
Aroclor-1254 {4} 12.73min area: 28188 m

Integration Time Range: 12.69 - 12.77

140

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Report generated: Thu Jun 14 14:56:45 2001

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP_03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES



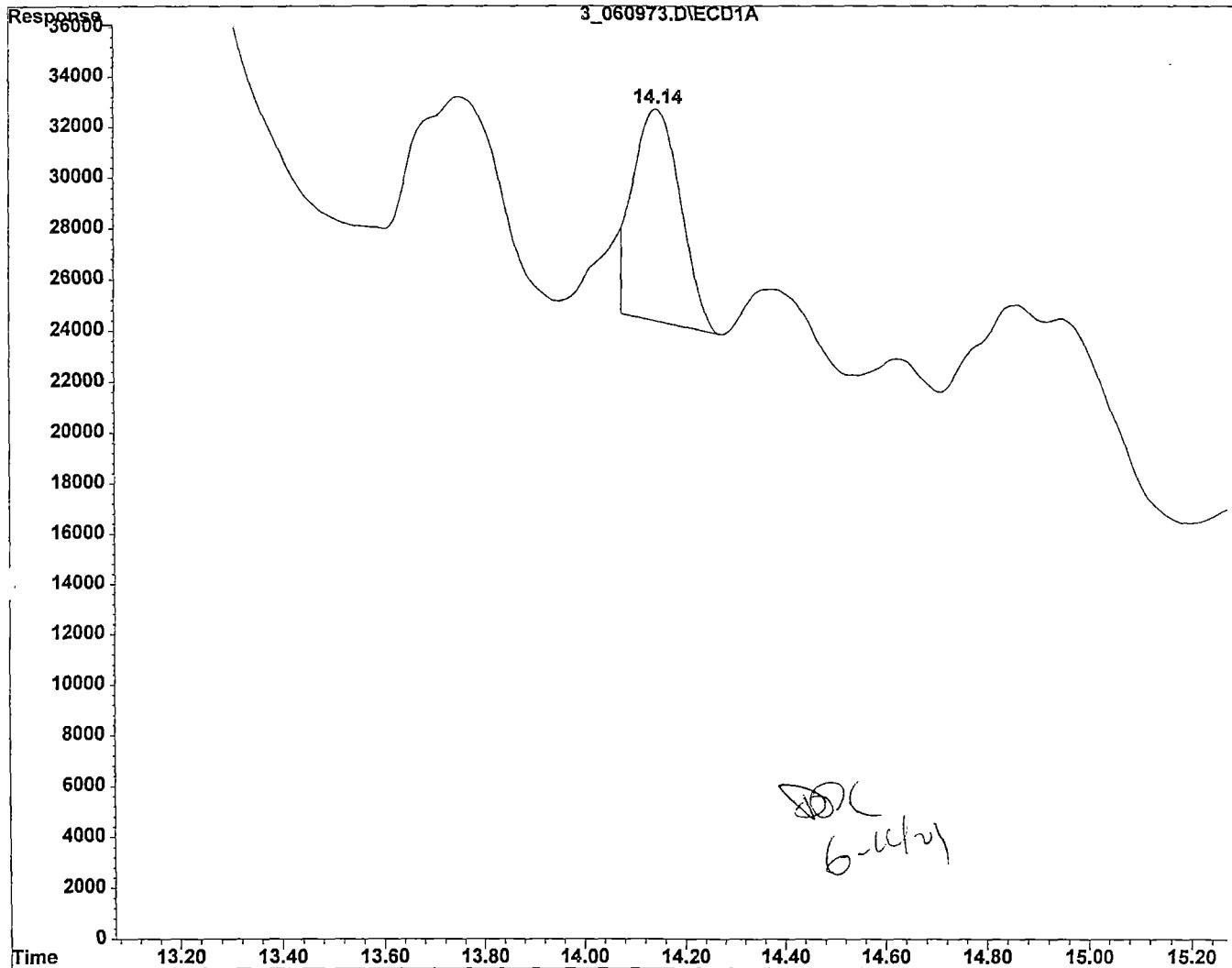
Aroclor-1260 12.15min area: 58272 m

Integration Time Range: 12.09 - 12.20

141

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Report generated: Thu Jun 14 14:56:46 2001

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP 03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES



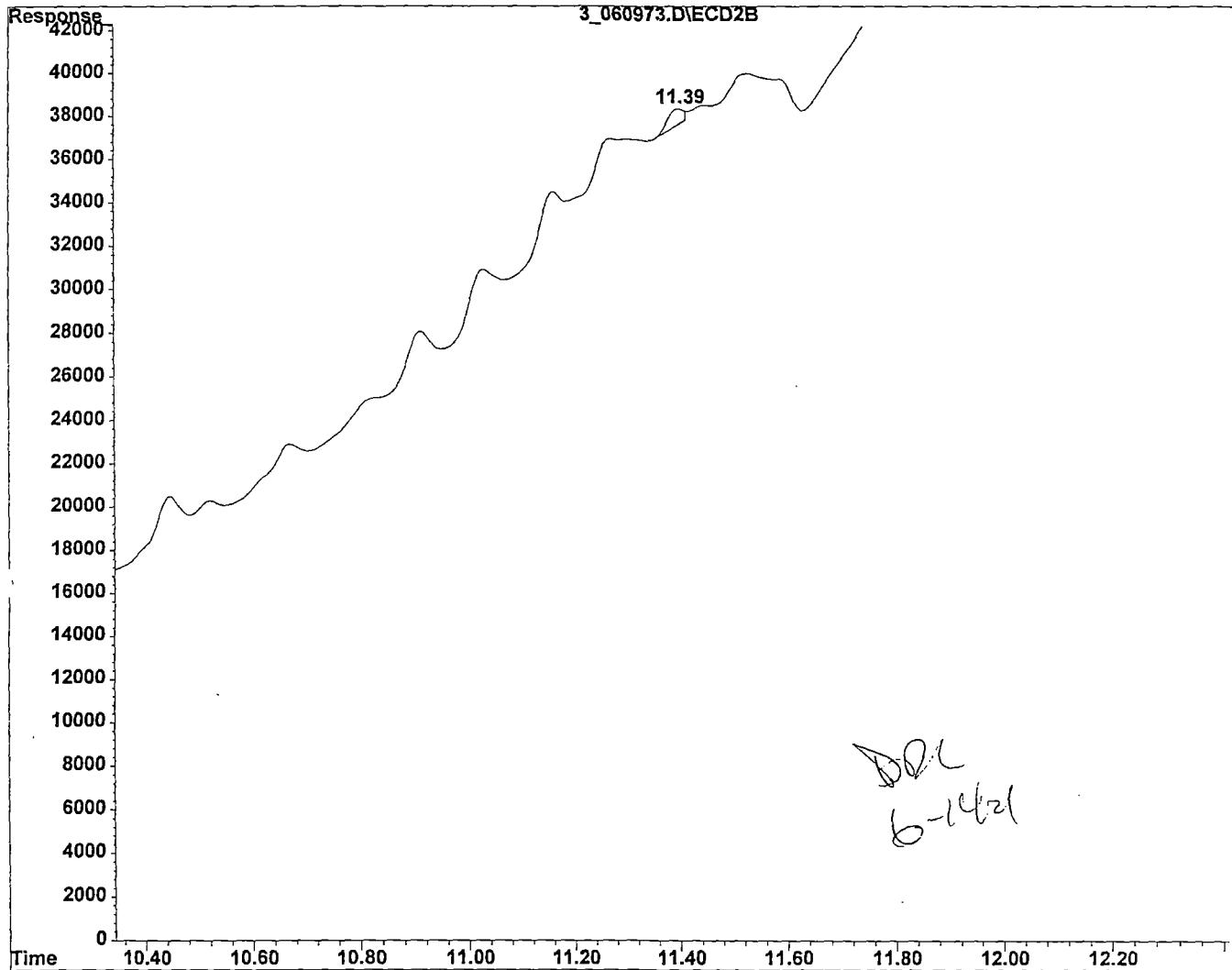
Aroclor-1260 {3} 14.14min area: 534280 m

Integration Time Range: 14.07 - 14.27

142

F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Report generated: Thu Jun 14 14:56:46 2001

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP_03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES



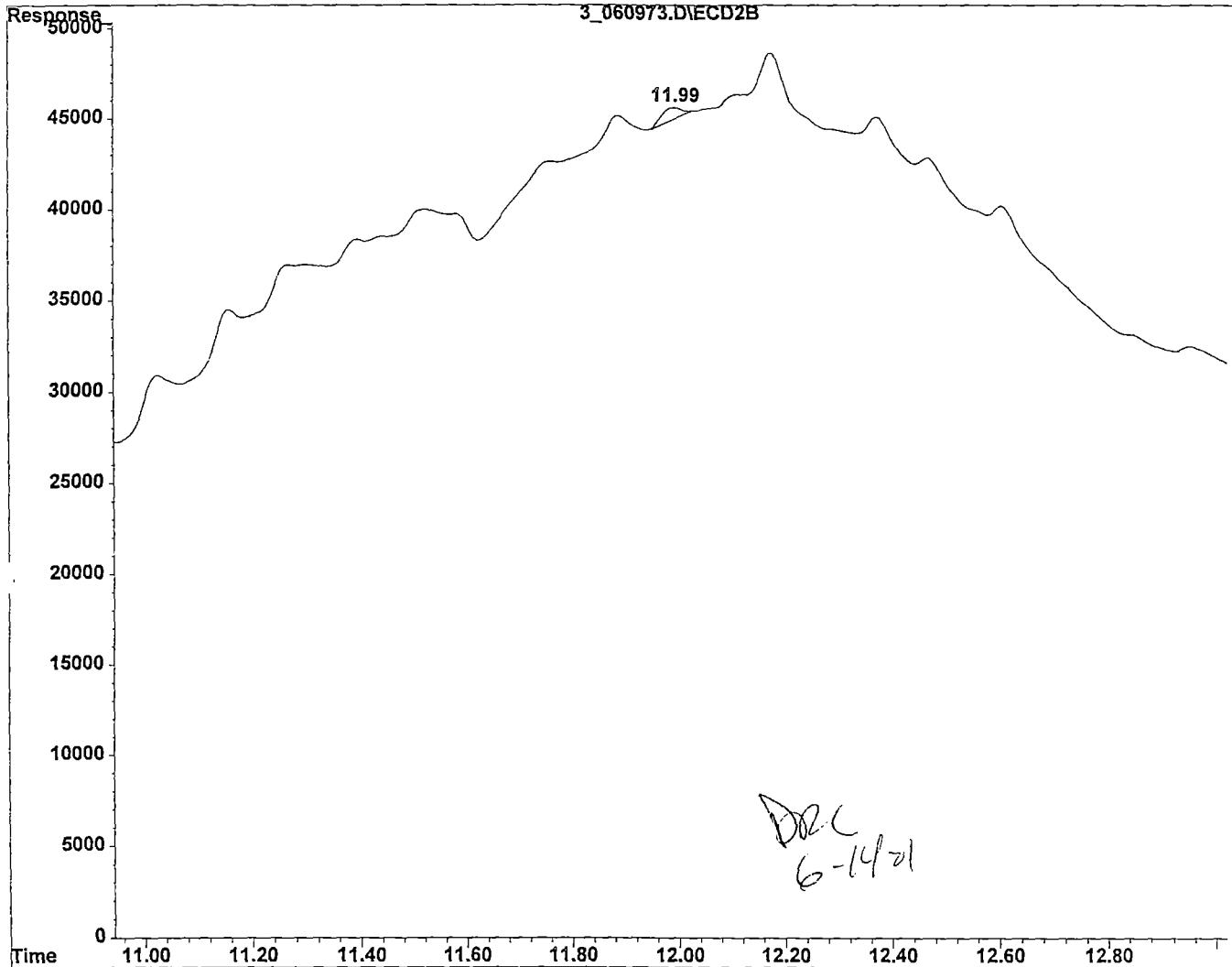
Aroclor-1254 {2} #2 11.39min area: 17804 m

Integration Time Range: 11.34 - 11.41

143

F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Report generated: Thu Jun 14 14:56:47 2001

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP_03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES



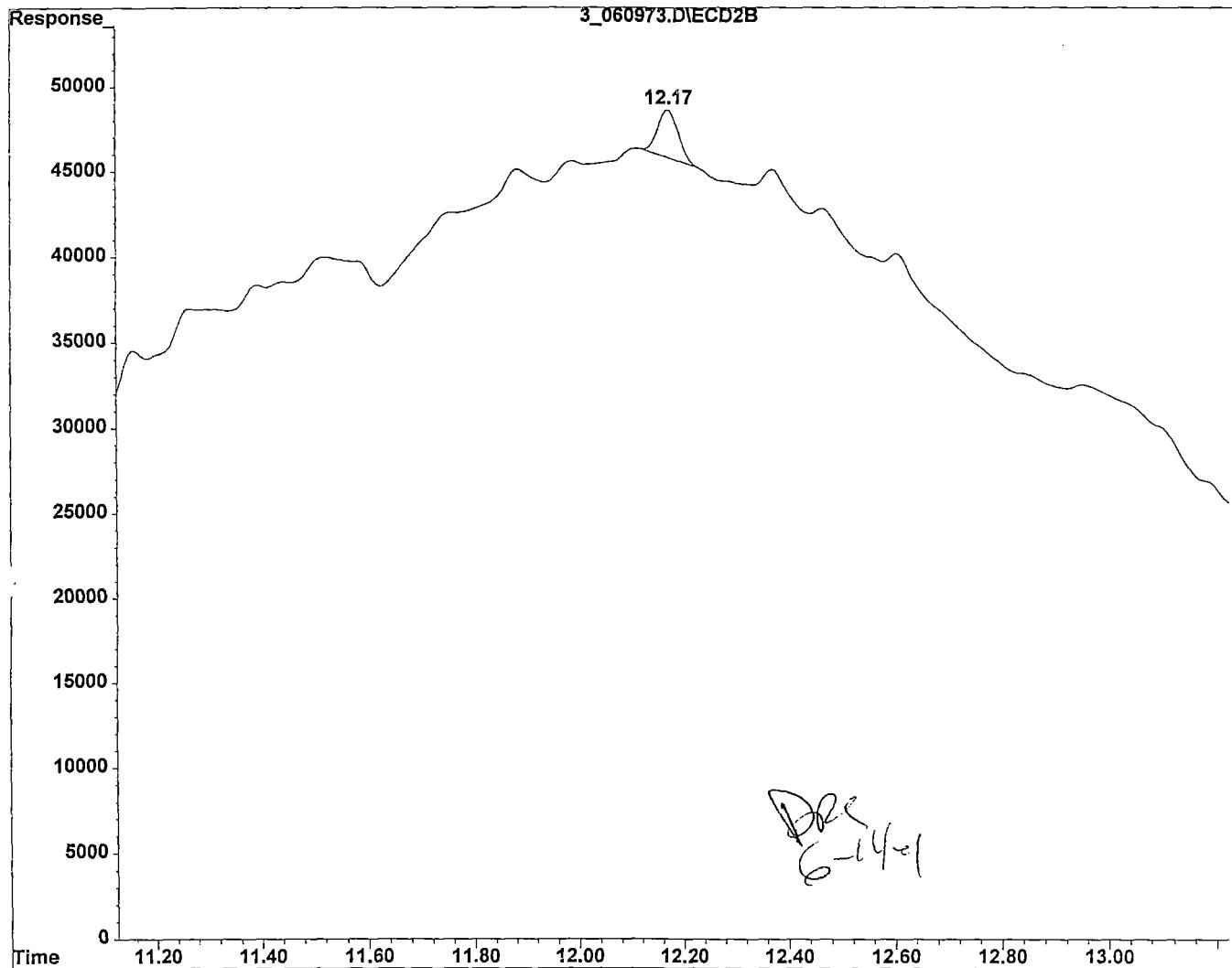
Aroclor-1254 {3} #2 11.99min area: 19304 m

Integration Time Range: 11.94 - 12.02

144

F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Report generated: Thu Jun 14 14:56:47 2001

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP_03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES



Aroclor-1254 {4} #2 12.17min area: 74452 m

Integration Time Range: 12.12 - 12.22

MANUAL INTEGRATION REPORT

Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D

Date Acquired: 10 Jun 2001 18:08

Inst: HP_03 Operator ID: DDC

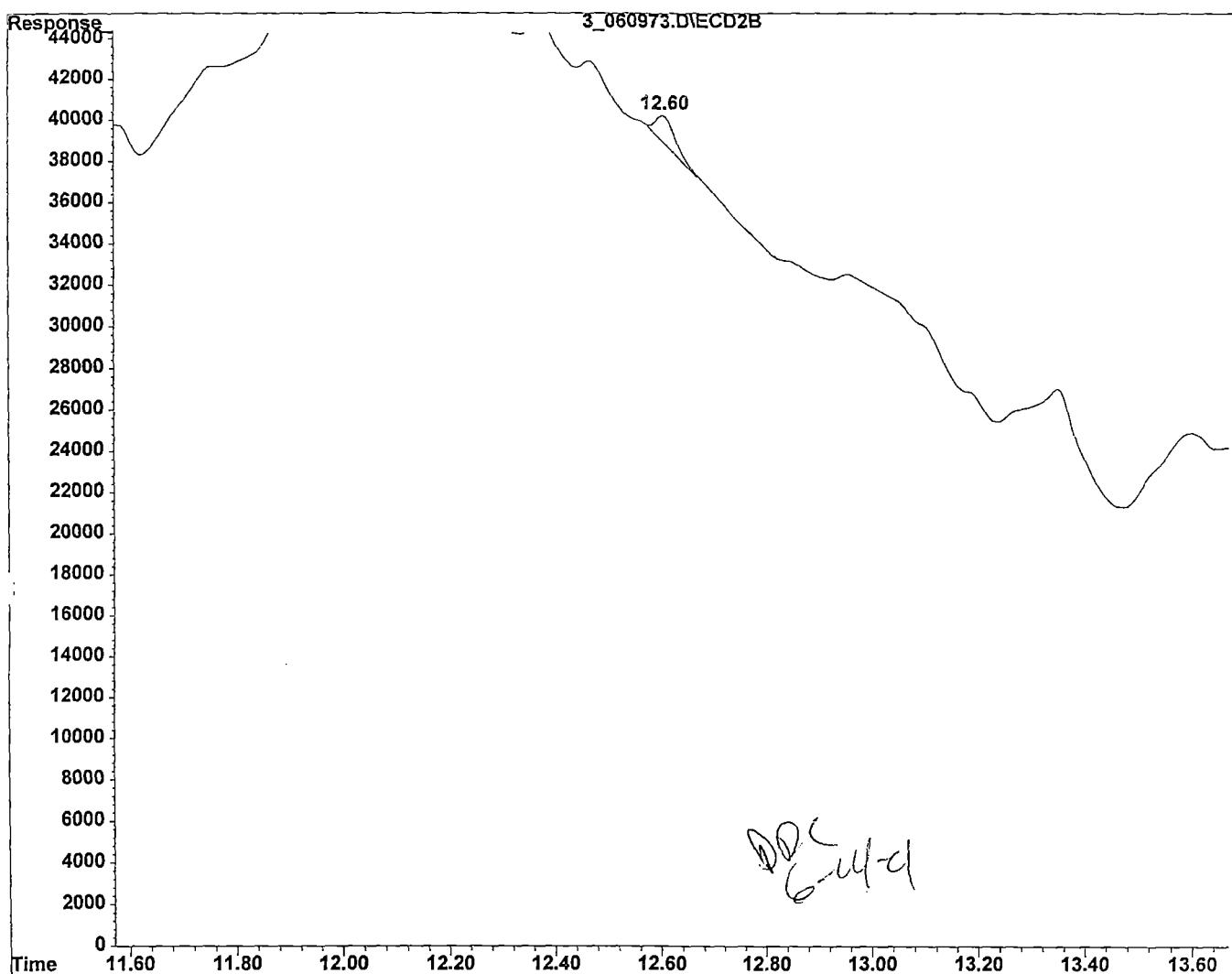
Name: 46676.27 *E30J4 *

Misc: *EPA*30G/5.0ML*26

Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M

Title: PCB/TOXAPHENE

Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES

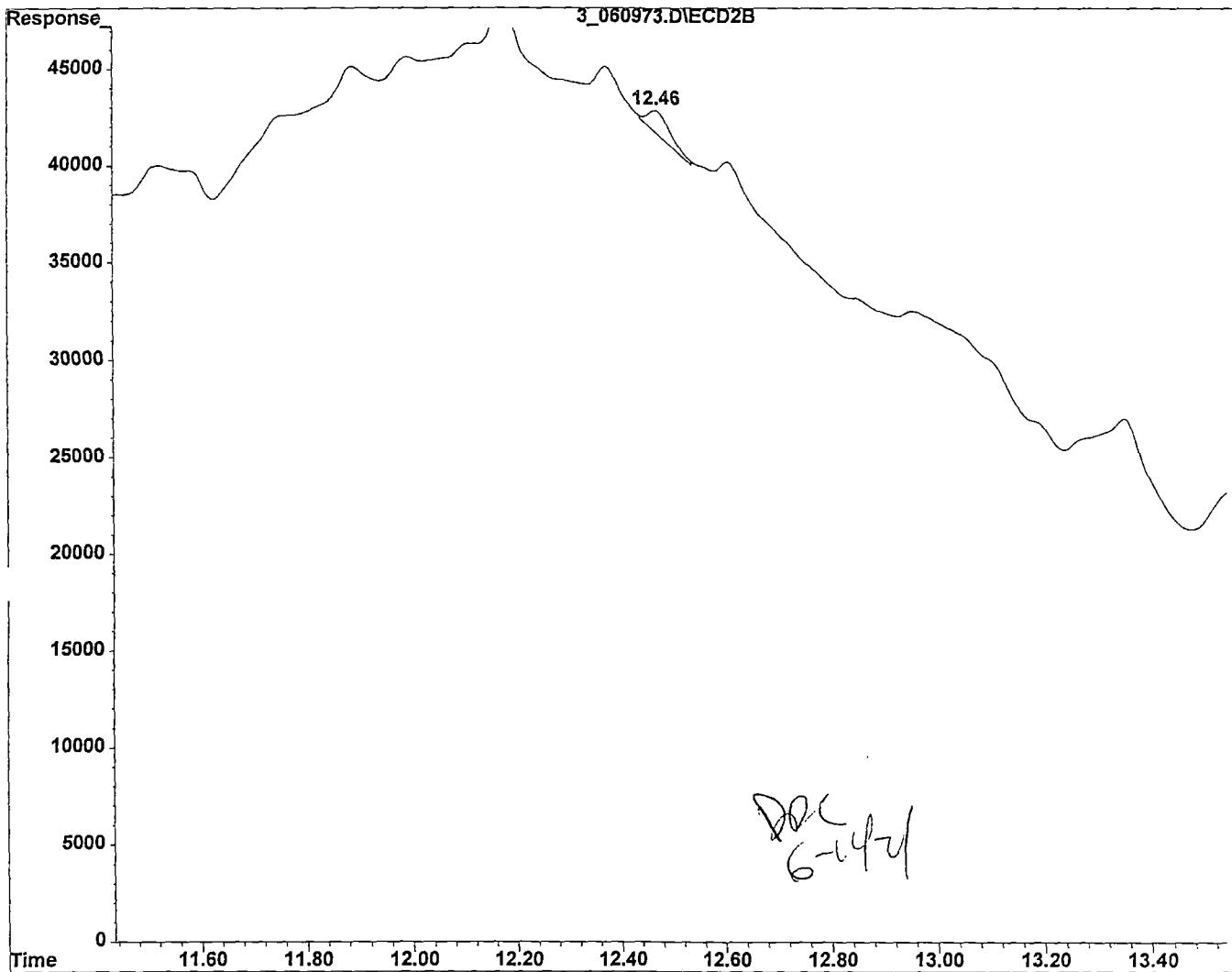


Aroclor-1254 {5} #2 12.60min area: 29392 m

Integration Time Range: 12.57 - 12.67

146

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP 03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENES
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES

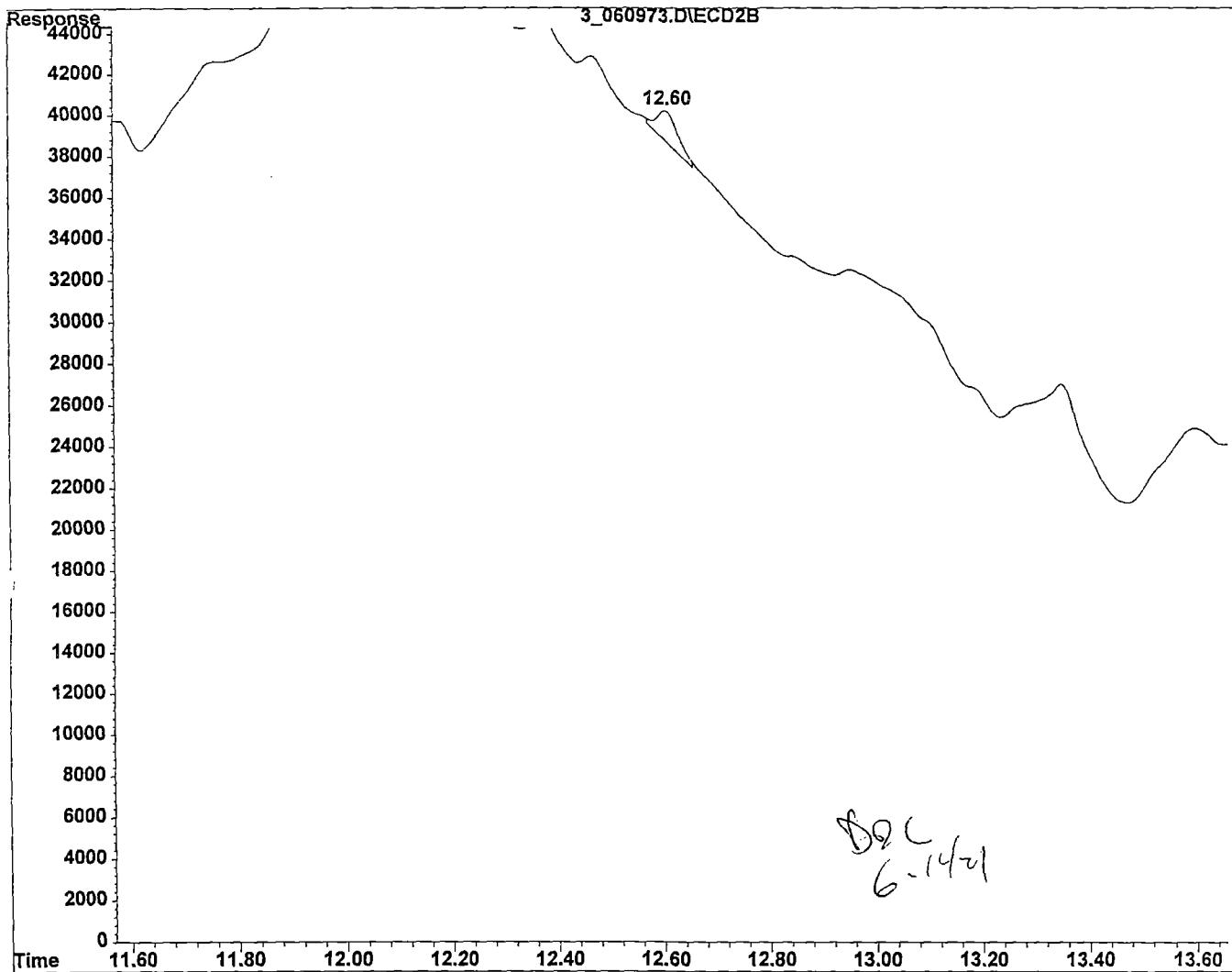


Aroclor-1260 #2 12.46min area: 31984 m

Integration Time Range: 12.43 ~ 12.54

147

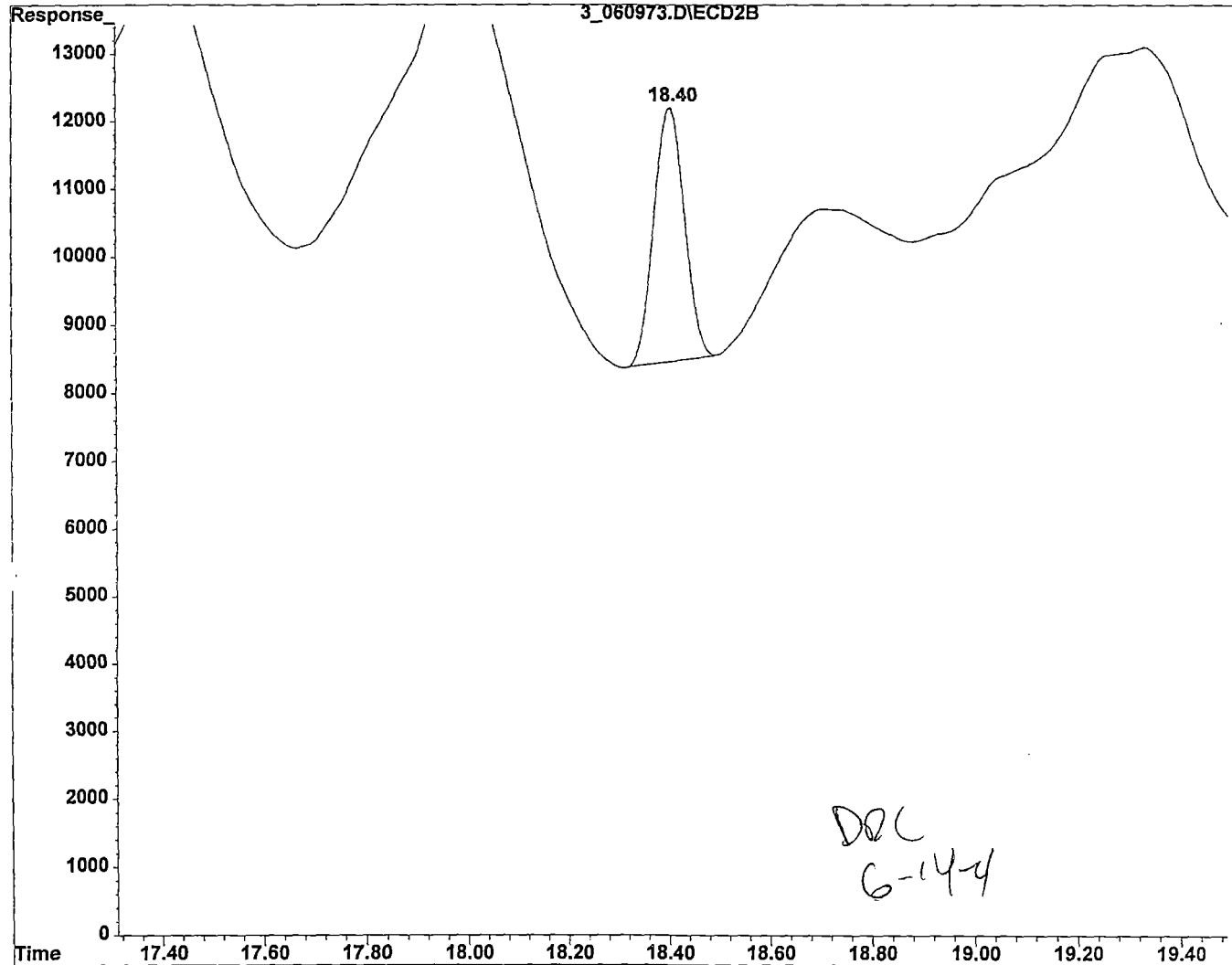
MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP_03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES



Aroclor-1260 {2} #2 12.60min area: 38604 m

Integration Time Range: 12.57 - 12.66

MANUAL INTEGRATION REPORT
Data File: F:\HPCHEM\HP\3\DATA\06_09_01\3_060973.D
Date Acquired: 10 Jun 2001 18:08
Inst: HP_03 Operator ID: DDC
Name: 46676.27 *E30J4 *
Misc: *EPA*30G/5.0ML*26
Method: F:\HPCHEM\HP\3\DATA\06_09_01\XPCBF09.M
Title: PCB/TOXAPHENE
Quant Time: Jun 14 14:56 2001 Quant Results File: XPCBF09.RES



DCB #2 18.40min area: 157727 m

Integration Time Range: 18.31 - 18.49

149

6F
AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03A Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	8.76	548370	MEAN
		2	9.06	208850	
		3	9.57	695000	
		4	10.20	901490	
		5	10.75	303990	
Aroclor 1242 L2	0.20	1	8.76	502425	MEAN
		2	9.06	152755	
		3	9.57	650830	
		4	10.20	788165	
		5	10.75	257440	
Aroclor 1242 L3	0.40	1	8.75	486453	MEAN
		2	9.04	164345	
		3	9.58	610420	
		4	10.19	748693	
		5	10.74	271735	
Aroclor 1242 L4	0.80	1	8.75	474094	MEAN
		2	9.03	174429	
		3	9.58	589999	
		4	10.19	739953	
		5	10.74	296936	
Aroclor 1242 L5	1.60	1	8.75	437732	MEAN
		2	9.02	179984	
		3	9.58	544103	
		4	10.18	684989	
		5	10.73	297624	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.75	8.70	8.80	489815	8.3
	2	9.04	8.99	9.09	176073	12.0
	3	9.58	9.53	9.63	618070	9.3
	4	10.19	10.14	10.24	772658	10.5
	5	10.74	10.69	10.79	285545	7.0

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03B Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-1701 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	7.80	144460	MEAN
		2	9.15	164880	
		3	9.69	183120	
		4	10.69	196580	
		5	11.07	301020	
Aroclor 1242 L2	0.20	1	7.80	157750	MEAN
		2	9.15	177440	
		3	9.69	194160	
		4	10.69	214260	
		5	11.07	292855	
Aroclor 1242 L3	0.40	1	7.80	145080	MEAN
		2	9.15	172770	
		3	9.69	166600	
		4	10.68	202815	
		5	11.06	275410	
Aroclor 1242 L4	0.80	1	7.80	145391	MEAN
		2	9.15	172214	
		3	9.69	144718	
		4	10.68	207301	
		5	11.06	283266	
Aroclor 1242 L5	1.60	1	7.80	140753	MEAN
		2	9.15	163383	
		3	9.69	98215	
		4	10.68	196578	
		5	11.05	271232	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	7.80	7.75	7.85	146687	4.4
	2	9.15	9.10	9.20	170137	3.5
	3	9.69	9.64	9.74	157363	24.1
	4	10.68	10.63	10.73	203507	3.7
	5	11.06	11.01	11.11	284757	4.3

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03A Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	9.75	1074390	MEAN
		2	11.62	333590	
		3	12.41	668450	
		4	12.75	273710	
		5	13.12	1484760	
Aroclor 1254 L2	0.20	1	9.75	1135760	MEAN
		2	11.62	504965	
		3	12.41	974135	
		4	12.75	423000	
		5	13.12	1724800	
Aroclor 1254 L3	0.40	1	9.75	939540	MEAN
		2	11.61	458728	
		3	12.40	938008	
		4	12.75	405645	
		5	13.12	1594738	
Aroclor 1254 L4	0.80	1	9.74	849209	MEAN
		2	11.61	437851	
		3	12.40	902419	
		4	12.75	379299	
		5	13.11	1480706	
Aroclor 1254 L5	1.60	1	9.74	782636	MEAN
		2	11.60	425075	
		3	12.37	904244	
		4	12.75	348389	
		5	13.11	1212806	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1254 MEAN	1	9.74	9.69	9.79	956307	15.5	
	2	11.61	11.56	11.66	432042	14.5	
	3	12.40	12.35	12.45	877451	13.7	
	4	12.75	12.70	12.80	366009	16.1	
	5	13.12	13.07	13.17	1499562	12.6	

6F
AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03B Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-1701 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	10.48	126620	MEAN
		2	11.42	332520	
		3	12.01	293730	
		4	12.20	756200	
		5	12.63	495900	
Aroclor 1254 L2	0.20	1	10.47	155615	MEAN
		2	11.42	384705	
		3	12.01	344130	
		4	12.20	883955	
		5	12.63	570295	
Aroclor 1254 L3	0.40	1	10.47	142273	MEAN
		2	11.41	371488	
		3	12.00	322975	
		4	12.20	825438	
		5	12.63	529760	
Aroclor 1254 L4	0.80	1	10.46	138206	MEAN
		2	11.41	356924	
		3	12.00	310820	
		4	12.19	855175	
		5	12.62	493431	
Aroclor 1254 L5	1.60	1	10.46	135924	MEAN
		2	11.41	248148	
		3	12.00	293266	
		4	12.19	724739	
		5	12.62	438169	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1254 MEAN	1	10.46	10.41	10.51	139728	7.6	
	2	11.41	11.36	11.46	338757	16.0	
	3	12.00	11.95	12.05	312984	6.8	
	4	12.20	12.15	12.25	809101	8.3	
	5	12.63	12.58	12.68	505511	9.7	

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03A Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	7.64	367200	MEAN
		2	8.32	1041400	
		3	8.76	649470	
		4	9.57	1166290	
		5	10.21	1128750	
Aroclor 1016 L2	0.20	1	7.64	398130	MEAN
		2	8.32	1201710	
		3	8.76	653860	
		4	9.57	915390	
		5	10.21	1073465	
Aroclor 1016 L3	0.40	1	7.63	418495	MEAN
		2	8.32	1214073	
		3	8.76	649405	
		4	9.58	868173	
		5	10.20	1048470	
Aroclor 1016 L4	0.80	1	7.63	411671	MEAN
		2	8.32	1149461	
		3	8.76	605720	
		4	9.58	785031	
		5	10.20	957539	
Aroclor 1016 L5	1.60	1	7.62	389983	MEAN
		2	8.31	1030110	
		3	8.76	543502	
		4	9.58	702136	
		5	10.19	878203	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	7.63	7.58	7.68	397096	5.1
	2	8.32	8.27	8.37	1127351	7.7
	3	8.76	8.71	8.81	620391	7.6
	4	9.58	9.53	9.63	887404	19.8
	5	10.20	10.15	10.25	1017285	9.8

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03A Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	12.17	1349880	MEAN
		2	12.55	1177980	
		3	13.16	1872470	
		4	13.68	657390	
		5	14.15	1548100	
Aroclor 1260 L2	0.20	1	12.16	1354975	MEAN
		2	12.55	1291500	
		3	13.16	2006275	
		4	13.68	688135	
		5	14.15	1604645	
Aroclor 1260 L3	0.40	1	12.16	1367418	MEAN
		2	12.54	1361695	
		3	13.15	2127223	
		4	13.67	728350	
		5	14.15	1695345	
Aroclor 1260 L4	0.80	1	12.16	1214689	MEAN
		2	12.54	1254115	
		3	13.15	1989738	
		4	13.67	677508	
		5	14.14	1595515	
Aroclor 1260 L5	1.60	1	12.16	1125029	MEAN
		2	12.53	1203813	
		3	13.15	2097412	
		4	13.67	674816	
		5	14.14	1611657	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	12.16	12.11	12.21	1282398	8.4
	2	12.54	12.49	12.59	1257821	5.8
	3	13.15	13.10	13.20	2018623	5.0
	4	13.67	13.62	13.72	685240	3.9
	5	14.15	14.10	14.20	1611052	3.3

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03B Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-1701 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	CALIBRATION		CALIB TYPE
			RT	FACTOR	
Aroclor 1016 L1	0.10	1	7.80	156310	MEAN
		2	8.60	506720	
		3	9.15	197710	
		4	9.88	323060	
		5	11.18	247300	
Aroclor 1016 L2	0.20	1	7.80	173000	MEAN
		2	8.60	526630	
		3	9.15	217895	
		4	9.88	365410	
		5	11.18	263975	
Aroclor 1016 L3	0.40	1	7.80	181478	MEAN
		2	8.60	529135	
		3	9.15	230130	
		4	9.88	400818	
		5	11.17	284883	
Aroclor 1016 L4	0.80	1	7.80	180323	MEAN
		2	8.60	501701	
		3	9.15	225041	
		4	9.87	391753	
		5	11.17	266000	
Aroclor 1016 L5	1.60	1	7.80	159782	MEAN
		2	8.60	454957	
		3	9.15	209079	
		4	9.87	376266	
		5	11.17	244902	

COMPOUND	PEAK	RT	RT WINDOW		MEAN FACTOR	% RSD
			FROM	TO		
Aroclor 1016 MEAN	1	7.80	7.75	7.85	170178	6.8
	2	8.60	8.55	8.65	503829	5.9
	3	9.15	9.10	9.20	215971	6.0
	4	9.88	9.83	9.93	371461	8.2
	5	11.17	11.12	11.22	261412	6.2

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03B Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-1701 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	12.49	680990	MEAN
		2	12.64	704400	
		3	13.42	1070480	
		4	14.05	442660	
		5	14.29	1075740	
Aroclor 1260 L2	0.20	1	12.49	741565	MEAN
		2	12.63	772090	
		3	13.42	1123810	
		4	14.05	468125	
		5	14.29	1111760	
Aroclor 1260 L3	0.40	1	12.49	756653	MEAN
		2	12.63	802085	
		3	13.42	1162585	
		4	14.05	501095	
		5	14.29	1184405	
Aroclor 1260 L4	0.80	1	12.49	691448	MEAN
		2	12.63	744398	
		3	13.42	1076563	
		4	14.05	472718	
		5	14.29	1109025	
Aroclor 1260 L5	1.60	1	12.48	641346	MEAN
		2	12.62	705979	
		3	13.42	1042701	
		4	14.05	476559	
		5	14.28	1120945	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	12.49	12.44	12.54	702400	6.7
	2	12.63	12.58	12.68	745790	5.7
	3	13.42	13.37	13.47	1095228	4.3
	4	14.05	14.00	14.10	472231	4.4
	5	14.29	14.24	14.34	1120375	3.5

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03A Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	7.20	416175	SINGLE
		2	7.50	194428	POINT
		3	7.62	1014483	
		4			
		5			
Aroclor 1232	0.40	1	7.50	159320	SINGLE
		2	8.75	319438	POINT
		3	9.42	421910	
		4	10.36	295388	
		5			
Aroclor 1248	0.40	1	9.78	2227430	SINGLE
		2	10.36	985060	POINT
		3	10.64	180580	
		4	11.32	1054463	
		5	11.93	482068	

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_03B Date(s) Analyzed: 06/09/01 06/09/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-1701 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	7.67	76250	SINGLE
		2	7.80	264308	POINT
		3	7.91	104328	
		4			
		5			
Aroclor 1232	0.40	1	7.37	91575	SINGLE
		2	7.67	62788	POINT
		3	9.15	105253	
		4	9.87	161723	
		5			
Aroclor 1248	0.40	1	9.70	108833	SINGLE
		2	9.87	358870	POINT
		3	10.86	135548	
		4	11.17	363935	
		5	11.76	152295	

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	8.42	601130	MEAN
		2	9.70	435880	
		3	10.64	947460	
		4	11.64	622150	
		5	12.80	751440	
Aroclor 1242 L2	0.20	1	8.42	546130	MEAN
		2	9.70	392985	
		3	10.64	895810	
		4	11.64	589055	
		5	12.80	717510	
Aroclor 1242 L3	0.40	1	8.42	503050	MEAN
		2	9.70	359753	
		3	10.64	830180	
		4	11.64	554193	
		5	12.80	663188	
Aroclor 1242 L4	0.80	1	8.42	432904	MEAN
		2	9.70	308001	
		3	10.64	696500	
		4	11.64	469978	
		5	12.80	569503	
Aroclor 1242 L5	1.60	1	8.42	384040	MEAN
		2	9.70	275690	
		3	10.64	631061	
		4	11.64	429548	
		5	12.80	524770	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.42	8.37	8.47	493451	17.6
	2	9.70	9.65	9.75	354462	18.1
	3	10.64	10.59	10.69	800202	16.7
	4	11.64	11.59	11.69	532985	15.2
	5	12.80	12.75	12.85	645282	14.9

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-1701 ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	10.39	273210	MEAN
		2	11.17	557320	
		3	12.39	347430	
		4	12.62	359610	
		5	13.13	571130	
Aroclor 1242 L2	0.20	1	10.39	266595	MEAN
		2	11.17	541325	
		3	12.39	336645	
		4	12.62	334780	
		5	13.13	505235	
Aroclor 1242 L3	0.40	1	10.39	259853	MEAN
		2	11.17	516140	
		3	12.40	331345	
		4	12.62	328848	
		5	13.13	496238	
Aroclor 1242 L4	0.80	1	10.39	226978	MEAN
		2	11.17	460031	
		3	12.40	295439	
		4	12.62	292011	
		5	13.13	438076	
Aroclor 1242 L5	1.60	1	10.39	216079	MEAN
		2	11.17	439303	
		3	12.40	286113	
		4	12.62	283236	
		5	13.13	428750	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1242 MEAN	1	10.39	10.34	10.44	248543	10.2	
	2	11.17	11.12	11.22	502824	10.2	
	3	12.40	12.35	12.45	319394	8.4	
	4	12.62	12.57	12.67	319697	9.9	
	5	13.13	13.08	13.18	487886	11.8	

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.63	1236120	MEAN
		2	13.32	628900	
		3	13.79	1004110	
		4	14.32	783880	
		5	15.00	746900	
Aroclor 1254 L2	0.20	1	12.62	1175250	MEAN
		2	13.32	617840	
		3	13.78	985495	
		4	14.31	766290	
		5	15.00	753540	
Aroclor 1254 L3	0.40	1	12.62	1147818	MEAN
		2	13.31	619368	
		3	13.78	998130	
		4	14.31	764535	
		5	14.99	775680	
Aroclor 1254 L4	0.80	1	12.63	903116	MEAN
		2	13.31	486773	
		3	13.78	787726	
		4	14.31	590501	
		5	14.99	601353	
Aroclor 1254 L5	1.60	1	12.63	815771	MEAN
		2	13.31	448910	
		3	13.78	742860	
		4	14.31	601276	
		5	14.99	642459	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB. %	RSD
Aroclor 1254 MEAN	1	12.63	12.58	12.68	1055615	17.5	
	2	13.31	13.26	13.36	560358	15.3	
	3	13.78	13.73	13.83	903664	14.1	
	4	14.31	14.26	14.36	701296	13.8	
	5	14.99	14.94	15.04	703986	10.9	

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AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.30	361030	MEAN
		2	13.01	557130	
		3	13.93	547980	
		4	14.92	761130	
		5	15.39	1031840	
Aroclor 1254 L2	0.20	1	12.29	357595	MEAN
		2	13.01	552270	
		3	13.92	530780	
		4	14.92	763525	
		5	15.38	1047650	
Aroclor 1254 L3	0.40	1	12.29	381878	MEAN
		2	13.01	620250	
		3	13.92	603450	
		4	14.92	852378	
		5	15.38	1183630	
Aroclor 1254 L4	0.80	1	12.30	297730	MEAN
		2	13.01	461306	
		3	13.92	438933	
		4	14.92	613241	
		5	15.38	877648	
Aroclor 1254 L5	1.60	1	12.29	285577	MEAN
		2	13.01	445271	
		3	13.92	411342	
		4	14.92	568363	
		5	15.38	843178	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1254 MEAN	1	12.29	12.24	12.34	336762	12.6	
	2	13.01	12.96	13.06	527245	13.8	
	3	13.92	13.87	13.97	506497	15.7	
	4	14.92	14.87	14.97	711727	16.5	
	5	15.38	15.33	15.43	996789	13.9	

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AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.42	671410	MEAN
		2	9.28	907150	
		3	10.58	1322300	
		4	11.20	760950	
		5	11.64	736490	
Aroclor 1016 L2	0.20	1	8.42	615200	MEAN
		2	9.28	828580	
		3	10.58	1231240	
		4	11.20	698055	
		5	11.64	684880	
Aroclor 1016 L3	0.40	1	8.42	566818	MEAN
		2	9.28	746900	
		3	10.58	1169683	
		4	11.20	646470	
		5	11.64	649205	
Aroclor 1016 L4	0.80	1	8.42	486519	MEAN
		2	9.28	628614	
		3	10.58	1024433	
		4	11.20	547654	
		5	11.64	561601	
Aroclor 1016 L5	1.60	1	8.42	438824	MEAN
		2	9.28	552864	
		3	10.58	959311	
		4	11.20	494656	
		5	11.64	520862	

COMPOUND	PEAK	RT	RT WINDOW		MEAN FACTOR	% RSD
			FROM	TO		
Aroclor 1016 MEAN	1	8.42	8.37	8.47	555754	17.0
	2	9.28	9.23	9.33	732822	19.7
	3	10.58	10.53	10.63	1141393	13.0
	4	11.20	11.15	11.25	629557	17.2
	5	11.64	11.59	11.69	630608	14.0

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.31	1624660	MEAN
		2	14.80	2100440	
		3	15.25	1867400	
		4	15.72	702010	
		5	16.16	1830860	
Aroclor 1260 L2	0.20	1	14.31	1361665	MEAN
		2	14.80	1876445	
		3	15.25	1710690	
		4	15.72	866495	
		5	16.16	1760375	
Aroclor 1260 L3	0.40	1	14.31	1251775	MEAN
		2	14.80	1724938	
		3	15.25	1595073	
		4	15.72	806313	
		5	16.16	1642008	
Aroclor 1260 L4	0.80	1	14.31	1048550	MEAN
		2	14.80	1450098	
		3	15.25	1366805	
		4	15.72	735414	
		5	16.16	1422536	
Aroclor 1260 L5	1.60	1	14.31	959239	MEAN
		2	14.80	1347235	
		3	15.25	1307398	
		4	15.72	702031	
		5	16.16	1385209	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.31	14.26	14.36	1249178	21.1
	2	14.80	14.75	14.85	1699831	18.1
	3	15.25	15.20	15.30	1569473	14.9
	4	15.72	15.67	15.77	762453	9.5
	5	16.16	16.11	16.21	1608198	12.4

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.89	523100	MEAN
		2	9.87	1291880	
		3	10.85	2148320	
		4	11.17	667680	
		5	12.29	730710	
Aroclor 1016 L2	0.20	1	8.89	525925	MEAN
		2	9.87	1232485	
		3	10.85	1940715	
		4	11.17	675370	
		5	12.29	701150	
Aroclor 1016 L3	0.40	1	8.89	486043	MEAN
		2	9.87	1128540	
		3	10.85	1905878	
		4	11.17	651448	
		5	12.29	678145	
Aroclor 1016 L4	0.80	1	8.89	424413	MEAN
		2	9.87	963605	
		3	10.85	1723228	
		4	11.17	574036	
		5	12.29	601629	
Aroclor 1016 L5	1.60	1	8.89	389047	MEAN
		2	9.87	869275	
		3	10.85	1658299	
		4	11.17	550129	
		5	12.29	573356	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.89	8.84	8.94	469705	13.0
	2	9.87	9.82	9.92	1097157	16.2
	3	10.85	10.80	10.90	1875288	10.3
	4	11.17	11.12	11.22	623733	9.2
	5	12.29	12.24	12.34	656998	10.2

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.43	815480	MEAN
		2	14.72	1379240	
		3	14.92	1506990	
		4	16.09	888340	
		5	16.32	2052290	
Aroclor 1260 L2	0.20	1	14.43	775265	MEAN
		2	14.72	1315235	
		3	14.92	1515505	
		4	16.09	855895	
		5	16.32	2016615	
Aroclor 1260 L3	0.40	1	14.43	743195	MEAN
		2	14.72	1230088	
		3	14.92	1423533	
		4	16.09	809575	
		5	16.32	1914743	
Aroclor 1260 L4	0.80	1	14.43	651408	MEAN
		2	14.72	1045794	
		3	14.92	1214591	
		4	16.08	698351	
		5	16.32	1684898	
Aroclor 1260 L5	1.60	1	14.43	626698	MEAN
		2	14.72	975288	
		3	14.92	1149826	
		4	16.08	679950	
		5	16.32	1670518	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1260 MEAN	1	14.43	14.38	14.48	722409	11.2
	2	14.72	14.67	14.77	1189129	14.6
	3	14.92	14.87	14.97	1362089	12.5
	4	16.09	16.04	16.14	786422	11.9
	5	16.32	16.27	16.37	1867813	9.7

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	CALIBRATION		CALIB TYPE
			RT	FACTOR	
Aroclor 1221	0.40	1	8.04	332215	SINGLE
		2	8.21	218200	POINT
		3	8.42	825493	
		4			
		5			
Aroclor 1232	0.40	1	8.42	714145	SINGLE
		2	9.28	374243	POINT
		3	9.70	261018	
		4	10.52	442973	
		5			
Aroclor 1248	0.40	1	9.28	357310	SINGLE
		2	10.52	598470	POINT
		3	11.42	317913	
		4	11.75	398980	
		5	13.12	657333	

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 05/30/01 05/30/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.36	285263	SINGLE
		2	8.70	210353	POINT
		3	8.88	629308	
		4			
		5			
Aroclor 1232	0.40	1	8.89	560615	SINGLE
		2	10.54	255253	POINT
		3	11.17	291893	
		4	12.39	171190	
		5			
Aroclor 1248	0.40	1	9.87	450093	SINGLE
		2	11.57	790330	POINT
		3	12.51	299578	
		4	13.24	442375	
		5	13.58	236850	

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AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	8.42	532940	MEAN
		2	9.70	327760	
		3	10.64	1113310	
		4	11.65	456130	
		5	12.80	829940	
Aroclor 1242 L2	0.20	1	8.42	504245	MEAN
		2	9.70	358705	
		3	10.65	1101590	
		4	11.65	482495	
		5	12.81	820905	
Aroclor 1242 L3	0.40	1	8.43	531365	MEAN
		2	9.70	334095	
		3	10.65	1035518	
		4	11.65	459290	
		5	12.82	704015	
Aroclor 1242 L4	0.80	1	8.43	509548	MEAN
		2	9.71	324156	
		3	10.65	1044860	
		4	11.66	466984	
		5	12.82	722706	
Aroclor 1242 L5	1.60	1	8.43	497128	MEAN
		2	9.71	310593	
		3	10.65	1018471	
		4	11.66	459828	
		5	12.82	728091	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1242 MEAN	1	8.43	8.38	8.48	515045	3.2	
	2	9.70	9.65	9.75	331062	5.3	
	3	10.65	10.60	10.70	1062750	4.0	
	4	11.65	11.60	11.70	464945	2.3	
	5	12.81	12.76	12.86	761131	7.8	

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	10.39	173470	MEAN
		2	11.18	277760	
		3	12.40	193000	
		4	12.63	145770	
		5	13.19	176490	
Aroclor 1242 L2	0.20	1	10.40	195240	MEAN
		2	11.18	283265	
		3	12.40	185620	
		4	12.64	154290	
		5	13.18	188095	
Aroclor 1242 L3	0.40	1	10.40	176550	MEAN
		2	11.18	258943	
		3	12.40	169973	
		4	12.64	151798	
		5	13.18	193728	
Aroclor 1242 L4	0.80	1	10.40	191491	MEAN
		2	11.18	296963	
		3	12.40	194610	
		4	12.64	174940	
		5	13.17	241766	
Aroclor 1242 L5	1.60	1	10.40	192859	MEAN
		2	11.18	322986	
		3	12.41	210522	
		4	12.64	205393	
		5	13.16	277249	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1242 MEAN	1	10.40	10.35	10.45	185922	5.4	
	2	11.18	11.13	11.23	287983	8.3	
	3	12.40	12.35	12.45	190745	7.7	
	4	12.64	12.59	12.69	166438	14.7	
	5	13.18	13.13	13.23	215466	19.8	

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.67	1070440	MEAN
		2	13.36	683030	
		3	13.83	594430	
		4	14.34	899080	
		5	15.03	667890	
Aroclor 1254 L2	0.20	1	12.65	1099620	MEAN
		2	13.36	735530	
		3	13.83	793560	
		4	14.34	812310	
		5	15.02	467775	
Aroclor 1254 L3	0.40	1	12.66	1234053	MEAN
		2	13.36	741923	
		3	13.82	1009488	
		4	14.34	785338	
		5	15.02	452203	
Aroclor 1254 L4	0.80	1	12.66	1229863	MEAN
		2	13.35	767449	
		3	13.82	776051	
		4	14.34	783463	
		5	15.02	488633	
Aroclor 1254 L5	1.60	1	12.66	1165376	MEAN
		2	13.35	749014	
		3	13.82	744132	
		4	14.34	750194	
		5	15.02	500119	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1254 MEAN	1	12.66	12.61	12.71	1159870	6.4
	2	13.36	13.31	13.41	735389	4.3
	3	13.82	13.77	13.87	783532	19.0
	4	14.34	14.29	14.39	806077	7.0
	5	15.02	14.97	15.07	515324	16.9

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AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	CALIBRATION		CALIB TYPE
			RT	FACTOR	
Aroclor 1254 L1	0.10	1	12.32	204000	MEAN
		2	13.08	204410	
		3	13.96	283490	
		4	14.95	497840	
		5	15.41	455850	
Aroclor 1254 L2	0.20	1	12.32	234745	MEAN
		2	13.08	244370	
		3	13.96	310905	
		4	14.95	542500	
		5	15.41	442455	
Aroclor 1254 L3	0.40	1	12.32	243298	MEAN
		2	13.07	262943	
		3	13.96	340688	
		4	14.95	553748	
		5	15.41	445095	
Aroclor 1254 L4	0.80	1	12.32	278423	MEAN
		2	13.06	344925	
		3	13.96	386225	
		4	14.94	626910	
		5	15.41	489153	
Aroclor 1254 L5	1.60	1	12.32	284878	MEAN
		2	13.06	309339	
		3	13.95	387515	
		4	14.94	664245	
		5	15.41	522939	

COMPOUND	PEAK	RT	RT WINDOW		MEAN FACTOR	CALIB.	% RSD
			FROM	TO			
Aroclor 1254 MEAN	1	12.32	12.27	12.37	249069	13.3	
	2	13.07	13.02	13.12	273197	20.1	
	3	13.96	13.91	14.01	341765	13.4	
	4	14.95	14.90	15.00	577049	11.7	
	5	15.41	15.36	15.46	471098	7.3	

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	CALIBRATION		CALIB TYPE
			RT	FACTOR	
Aroclor 1016 L1	0.10	1	8.43	579320	MEAN
		2	9.29	749630	
		3	10.59	705340	
		4	11.22	566990	
		5	11.66	503900	
Aroclor 1016 L2	0.20	1	8.43	601840	MEAN
		2	9.29	700325	
		3	10.59	680300	
		4	11.22	561700	
		5	11.66	512730	
Aroclor 1016 L3	0.40	1	8.43	659650	MEAN
		2	9.29	747548	
		3	10.59	817335	
		4	11.22	658718	
		5	11.66	637965	
Aroclor 1016 L4	0.80	1	8.43	505930	MEAN
		2	9.28	557574	
		3	10.59	648644	
		4	11.22	499098	
		5	11.66	482718	
Aroclor 1016 L5	1.60	1	8.43	455359	MEAN
		2	9.28	483726	
		3	10.58	622361	
		4	11.22	439893	
		5	11.66	439405	

COMPOUND	PEAK	RT	RT WINDOW		MEAN FACTOR	CALIB.	% RSD
			FROM	TO			
Aroclor 1016 MEAN	1	8.43	8.38	8.48	560420	14.4	
	2	9.29	9.24	9.34	647761	18.6	
	3	10.59	10.54	10.64	694796	10.8	
	4	11.22	11.17	11.27	545280	15.0	
	5	11.66	11.61	11.71	515344	14.4	

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.35	1559950	MEAN
		2	14.84	1467790	_____
		3	15.28	1308170	_____
		4	15.74	979990	_____
		5	16.18	1579950	_____
Aroclor 1260 L2	0.20	1	14.35	1594315	MEAN
		2	14.84	1537310	_____
		3	15.28	1358920	_____
		4	15.74	1099015	_____
		5	16.18	1441375	_____
Aroclor 1260 L3	0.40	1	14.34	1917863	MEAN
		2	14.83	1912360	_____
		3	15.28	1760880	_____
		4	15.74	1230068	_____
		5	16.18	1939115	_____
Aroclor 1260 L4	0.80	1	14.34	1464086	MEAN
		2	14.83	1502539	_____
		3	15.28	1409606	_____
		4	15.74	1110379	_____
		5	16.18	1540686	_____
Aroclor 1260 L5	1.60	1	14.34	1336359	MEAN
		2	14.83	1456321	_____
		3	15.28	1404615	_____
		4	15.74	944215	_____
		5	16.18	1601214	_____

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1260 MEAN	1	14.34	14.29	14.39	1574515	13.7	
	2	14.83	14.78	14.88	1575264	12.1	
	3	15.28	15.23	15.33	1448438	12.4	
	4	15.74	15.69	15.79	1072733	10.6	
	5	16.18	16.13	16.23	1620468	11.6	

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.90	381810	MEAN
		2	9.88	1091870	
		3	10.86	1292380	
		4	11.19	319670	
		5	12.32	379520	
Aroclor 1016 L2	0.20	1	8.90	368535	MEAN
		2	9.88	1070535	
		3	10.86	1317565	
		4	11.19	322175	
		5	12.32	394940	
Aroclor 1016 L3	0.40	1	8.90	443018	MEAN
		2	9.88	1198468	
		3	10.86	1665665	
		4	11.19	411833	
		5	12.32	493805	
Aroclor 1016 L4	0.80	1	8.90	414524	MEAN
		2	9.88	925198	
		3	10.86	1362729	
		4	11.19	341594	
		5	12.32	398766	
Aroclor 1016 L5	1.60	1	8.90	487859	MEAN
		2	9.88	859230	
		3	10.86	1389553	
		4	11.18	355935	
		5	12.32	394781	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.90	8.85	8.95	419149	11.5
	2	9.88	9.83	9.93	1029060	13.2
	3	10.86	10.81	10.91	1405578	10.7
	4	11.19	11.14	11.24	350241	10.7
	5	12.32	12.27	12.37	412362	11.2

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.46	502130	MEAN
		2	14.75	1219290	
		3	14.95	1032900	
		4	16.11	631800	
		5	16.34	1177030	
Aroclor 1260 L2	0.20	1	14.46	535565	MEAN
		2	14.75	1270100	
		3	14.95	1096060	
		4	16.11	629490	
		5	16.34	1186270	
Aroclor 1260 L3	0.40	1	14.46	687818	MEAN
		2	14.74	1581288	
		3	14.94	1462740	
		4	16.10	821030	
		5	16.34	1630008	
Aroclor 1260 L4	0.80	1	14.46	567981	MEAN
		2	14.74	1261041	
		3	14.94	1207753	
		4	16.10	676456	
		5	16.33	1369810	
Aroclor 1260 L5	1.60	1	14.46	577493	MEAN
		2	14.74	1227568	
		3	14.94	1230158	
		4	16.10	693310	
		5	16.33	1475100	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1260 MEAN	1	14.46	14.41	14.51	574197	12.2	
	2	14.74	14.69	14.79	1311857	11.6	
	3	14.94	14.89	14.99	1205922	13.7	
	4	16.10	16.05	16.15	690417	11.3	
	5	16.34	16.29	16.39	1367644	14.1	

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.04	341840	SINGLE
		2	8.21	216638	POINT
		3	8.42	777180	
		4			
		5			
Aroclor 1232	0.40	1	8.42	656795	SINGLE
		2	9.28	351270	POINT
		3	9.70	221368	
		4	10.52	288853	
		5			
Aroclor 1248	0.40	1	9.29	334155	SINGLE
		2	10.53	337383	POINT
		3	11.42	570555	
		4	11.76	457710	
		5	13.22	875818	

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/12/01 06/12/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.37	243455	SINGLE
		2	8.71	178268	POINT
		3	8.89	523670	
		4			
		5			
Aroclor 1232	0.40	1	8.89	444368	SINGLE
		2	10.55	263245	POINT
		3	11.17	171300	
		4	12.39	100933	
		5			
Aroclor 1248	0.40	1	9.88	403018	SINGLE
		2	11.59	552933	POINT
		3	12.53	212605	
		4	13.26	438110	
		5	13.62	114113	

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/14/01 06/14/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	8.42	664620	MEAN
		2	9.70	431270	
		3	10.64	1180000	
		4	11.65	626890	
		5	12.82	889640	
Aroclor 1242 L2	0.20	1	8.42	676060	MEAN
		2	9.70	463215	
		3	10.64	1196685	
		4	11.64	669200	
		5	12.81	934410	
Aroclor 1242 L3	0.40	1	8.42	569663	MEAN
		2	9.70	391655	
		3	10.64	994758	
		4	11.64	572580	
		5	12.81	800968	
Aroclor 1242 L4	0.80	1	8.42	519064	MEAN
		2	9.70	348104	
		3	10.64	887894	
		4	11.64	515894	
		5	12.81	709150	
Aroclor 1242 L5	1.60	1	8.42	480072	MEAN
		2	9.70	323281	
		3	10.64	815075	
		4	11.64	488104	
		5	12.81	648654	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1242 MEAN	1	8.42	8.37	8.47	581896	14.9
	2	9.70	9.65	9.75	391505	14.7
	3	10.64	10.59	10.69	1014882	16.8
	4	11.64	11.59	11.69	574534	13.1
	5	12.81	12.76	12.86	796564	15.0

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/14/01 06/14/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1242 L1	0.10	1	10.40	328290	MEAN
		2	11.18	458310	
		3	12.40	226860	
		4	12.64	296180	
		5	13.16	424240	
Aroclor 1242 L2	0.20	1	10.40	308150	MEAN
		2	11.18	527150	
		3	12.40	287435	
		4	12.64	332650	
		5	13.15	465130	
Aroclor 1242 L3	0.40	1	10.40	269228	MEAN
		2	11.18	490823	
		3	12.40	284498	
		4	12.64	310398	
		5	13.15	427783	
Aroclor 1242 L4	0.80	1	10.40	252833	MEAN
		2	11.18	464951	
		3	12.40	275704	
		4	12.64	297655	
		5	13.15	411609	
Aroclor 1242 L5	1.60	1	10.40	250581	MEAN
		2	11.18	452749	
		3	12.40	272488	
		4	12.63	298319	
		5	13.15	417811	

COMPOUND	PEAK	RT	RT WINDOW		MEAN CALIB.	% RSD
			FROM	TO		
Aroclor 1242 MEAN	1	10.40	10.35	10.45	281816	12.3
	2	11.18	11.13	11.23	478797	6.4
	3	12.40	12.35	12.45	269397	9.1
	4	12.64	12.59	12.69	307040	5.0
	5	13.15	13.10	13.20	429315	4.9

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/14/01 06/14/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.63	1354190	MEAN
		2	13.32	852680	
		3	13.79	1130160	
		4	14.32	1042710	
		5	15.00	811800	
Aroclor 1254 L2	0.20	1	12.63	1244390	MEAN
		2	13.32	790885	
		3	13.79	1057770	
		4	14.32	964245	
		5	15.00	755995	
Aroclor 1254 L3	0.40	1	12.63	1197170	MEAN
		2	13.32	770083	
		3	13.79	1068970	
		4	14.31	963943	
		5	15.00	796793	
Aroclor 1254 L4	0.80	1	12.63	1047134	MEAN
		2	13.32	677325	
		3	13.79	973559	
		4	14.31	861929	
		5	15.00	768728	
Aroclor 1254 L5	1.60	1	12.62	960460	MEAN
		2	13.31	619195	
		3	13.78	927454	
		4	14.31	792509	
		5	15.00	757597	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1254 MEAN	1	12.63	12.58	12.68	1160669	13.5	
	2	13.32	13.27	13.37	742034	12.6	
	3	13.79	13.74	13.84	1031583	7.8	
	4	14.31	14.26	14.36	925067	10.6	
	5	15.00	14.95	15.05	778182	3.2	

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/14/01 06/14/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1254 L1	0.10	1	12.31	393420	MEAN
		2	13.03	470210	
		3	13.94	530240	
		4	14.93	794340	
		5	15.40	925580	
Aroclor 1254 L2	0.20	1	12.31	384045	MEAN
		2	13.03	462840	
		3	13.94	520895	
		4	14.93	731295	
		5	15.40	871060	
Aroclor 1254 L3	0.40	1	12.30	359990	MEAN
		2	13.02	490663	
		3	13.94	541980	
		4	14.93	766540	
		5	15.40	934830	
Aroclor 1254 L4	0.80	1	12.31	337459	MEAN
		2	13.02	474138	
		3	13.93	507148	
		4	14.93	720706	
		5	15.40	917469	
Aroclor 1254 L5	1.60	1	12.30	332944	MEAN
		2	13.02	478175	
		3	13.93	492271	
		4	14.93	687450	
		5	15.39	925389	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1254 MEAN	1	12.30	12.25	12.35	361572	7.5	
	2	13.02	12.97	13.07	475205	2.2	
	3	13.94	13.89	13.99	518507	3.7	
	4	14.93	14.88	14.98	740066	5.6	
	5	15.40	15.35	15.45	914866	2.8	

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/14/01 06/14/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.03	384860	SINGLE
		2	8.21	234865	POINT
		3	8.42	919358	
		4			
		5			
Aroclor 1232	0.40	1	8.42	814160	SINGLE
		2	9.27	432953	POINT
		3	9.70	280733	
		4	10.52	459765	
		5			
Aroclor 1248	0.40	1	9.28	415635	SINGLE
		2	10.52	623393	POINT
		3	11.41	463830	
		4	11.75	498110	
		5	13.19	919535	

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/14/01 06/14/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1221	0.40	1	8.37	307348	SINGLE
		2	8.71	233798	POINT
		3	8.89	669085	
		4			
		5			
Aroclor 1232	0.40	1	8.89	606745	SINGLE
		2	10.55	270270	POINT
		3	11.18	282938	
		4	12.40	147110	
		5			
Aroclor 1248	0.40	1	9.88	520953	SINGLE
		2	11.58	857708	POINT
		3	12.52	314513	
		4	13.25	569510	
		5	13.59	224343	

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/15/01 06/15/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.42	738450	MEAN
		2	9.28	990920	
		3	10.58	1186730	
		4	11.20	812690	
		5	11.64	741060	
Aroclor 1016 L2	0.20	1	8.42	706515	MEAN
		2	9.27	914520	
		3	10.58	1136515	
		4	11.20	768955	
		5	11.64	723050	
Aroclor 1016 L3	0.40	1	8.42	645238	MEAN
		2	9.28	820375	
		3	10.58	1102935	
		4	11.20	704955	
		5	11.64	682690	
Aroclor 1016 L4	0.80	1	8.42	660726	MEAN
		2	9.27	818364	
		3	10.58	1183484	
		4	11.20	716871	
		5	11.64	719753	
Aroclor 1016 L5	1.60	1	8.42	550421	MEAN
		2	9.27	664431	
		3	10.58	1038345	
		4	11.20	602249	
		5	11.64	619226	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN CALIB. FACTOR	% RSD
Aroclor 1016 MEAN	1	8.42	8.37	8.47	660270	10.9
	2	9.27	9.22	9.32	841722	14.5
	3	10.58	10.53	10.63	1129602	5.5
	4	11.20	11.15	11.25	721144	11.0
	5	11.64	11.59	11.69	697156	7.0

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AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15A Date(s) Analyzed: 06/15/01 06/15/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-17MS ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.32	1874150	MEAN
		2	14.81	2459160	_____
		3	15.26	2235550	_____
		4	15.72	1204690	_____
		5	16.17	2460320	_____
Aroclor 1260 L2	0.20	1	14.32	1722650	MEAN
		2	14.81	2269205	_____
		3	15.26	2097835	_____
		4	15.72	1208850	_____
		5	16.16	2311980	_____
Aroclor 1260 L3	0.40	1	14.31	1587458	MEAN
		2	14.81	2134213	_____
		3	15.26	2044663	_____
		4	15.72	1211755	_____
		5	16.16	2407915	_____
Aroclor 1260 L4	0.80	1	14.31	1587676	MEAN
		2	14.80	2170741	_____
		3	15.26	2128451	_____
		4	15.72	1224845	_____
		5	16.16	2427140	_____
Aroclor 1260 L5	1.60	1	14.31	1361061	MEAN
		2	14.80	1902787	_____
		3	15.25	1924112	_____
		4	15.72	1106082	_____
		5	16.16	2242677	_____

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1260 MEAN	1	14.31	14.26	14.36	1626599	11.7	
	2	14.81	14.76	14.86	2187221	9.3	
	3	15.26	15.21	15.31	2086122	5.5	
	4	15.72	15.67	15.77	1191244	4.0	
	5	16.16	16.11	16.21	2370006	3.8	

AROCLOL INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/15/01 06/15/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1016 L1	0.10	1	8.89	576010	MEAN
		2	9.88	1410260	_____
		3	10.86	1987780	_____
		4	11.18	620580	_____
		5	12.30	699230	_____
Aroclor 1016 L2	0.20	1	8.89	554130	MEAN
		2	9.88	1316915	_____
		3	10.86	1970985	_____
		4	11.18	618165	_____
		5	12.30	705495	_____
Aroclor 1016 L3	0.40	1	8.89	512588	MEAN
		2	9.88	1205165	_____
		3	10.86	1919785	_____
		4	11.18	615683	_____
		5	12.30	675705	_____
Aroclor 1016 L4	0.80	1	8.89	537636	MEAN
		2	9.88	1240376	_____
		3	10.86	2163193	_____
		4	11.18	687905	_____
		5	12.30	741581	_____
Aroclor 1016 L5	1.60	1	8.89	461864	MEAN
		2	9.88	1035686	_____
		3	10.86	1952811	_____
		4	11.18	618398	_____
		5	12.30	659559	_____

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1016 MEAN	1	8.89	8.84	8.94	528446	8.3	
	2	9.88	9.83	9.93	1241681	11.2	
	3	10.86	10.81	10.91	1998911	4.8	
	4	11.18	11.13	11.23	632146	4.9	
	5	12.30	12.25	12.35	696314	4.5	

AROCLOR INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Instrument ID: HP_15B Date(s) Analyzed: 06/15/01 06/15/01

Level (x Level 1): L1: 1.0 L2: 2.0 L3: 4.0 L4: 8.0 L5: 16.0

GC Column: DB-XLB ID: 0.32(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	CALIBRATION FACTOR	CALIB TYPE
Aroclor 1260 L1	0.10	1	14.45	894730	MEAN
		2	14.73	1591790	
		3	14.93	1861870	
		4	16.10	1023360	
		5	16.33	2408050	
Aroclor 1260 L2	0.20	1	14.44	856875	MEAN
		2	14.73	1479185	
		3	14.93	1714690	
		4	16.10	960915	
		5	16.33	2300000	
Aroclor 1260 L3	0.40	1	14.44	826690	MEAN
		2	14.73	1389670	
		3	14.93	1630365	
		4	16.10	943100	
		5	16.33	2252848	
Aroclor 1260 L4	0.80	1	14.44	902056	MEAN
		2	14.73	1458426	
		3	14.93	1732690	
		4	16.10	1013381	
		5	16.33	2499388	
Aroclor 1260 L5	1.60	1	14.44	819836	MEAN
		2	14.73	1262104	
		3	14.93	1557877	
		4	16.09	936229	
		5	16.33	2362651	

COMPOUND	PEAK	RT	RT WINDOW FROM	TO	MEAN FACTOR	CALIB.	% RSD
Aroclor 1260 MEAN	1	14.44	14.39	14.49	860037	4.4	
	2	14.73	14.68	14.78	1436235	8.5	
	3	14.93	14.88	14.98	1699498	6.7	
	4	16.10	16.05	16.15	975397	4.1	
	5	16.33	16.28	16.38	2364587	4.1	

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAM Date Analyzed : 06/08/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1300

Client Sample No.: AR1660L3BX Date Analyzed : 06/08/01

Lab Sample ID : 5-445-6 Time Analyzed : 1323

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.42	8.37	8.47	506840	555754	8.8
Aroclor 1016 #2	9.28	9.23	9.33	647793	732822	11.6
Aroclor 1016 #3	10.58	10.53	10.63	797635	1141390	30.1*
Aroclor 1016 #4	11.21	11.15	11.25	546653	629557	13.2
Aroclor 1016 #5	11.66	11.59	11.69	552045	630608	12.4
Aroclor 1260 #1	14.33	14.26	14.36	1240995	1249180	0.7
Aroclor 1260 #2	14.82	14.75	14.85	1559913	1699830	8.2
Aroclor 1260 #3	15.26	15.20	15.30	1403465	1569470	10.6
Aroclor 1260 #4	15.73	15.67	15.77	815685	762453	7.0
Aroclor 1260 #5	16.17	16.11	16.21	1409485	1608200	12.4

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAM Date Analyzed : 06/08/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1300

Client Sample No.: AR1660L3BX Date Analyzed : 06/08/01

Lab Sample ID : 5-445-6 Time Analyzed : 1323

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.89	8.84	8.94	482215	469705	2.7
Aroclor 1016 #2	9.87	9.82	9.92	1072388	1097160	2.3
Aroclor 1016 #3	10.85	10.80	10.90	1650395	1875290	12.0
Aroclor 1016 #4	11.18	11.12	11.22	400065	623733	35.8*
Aroclor 1016 #5	12.31	12.24	12.34	562103	656998	14.4
Aroclor 1260 #1	14.44	14.38	14.48	625420	722409	13.4
Aroclor 1260 #2	14.73	14.67	14.77	1048385	1189130	11.8
Aroclor 1260 #3	14.93	14.87	14.97	1167003	1362090	14.3
Aroclor 1260 #4	16.09	16.04	16.14	658580	786422	16.2*
Aroclor 1260 #5	16.32	16.27	16.37	1427135	1867810	23.6*

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAM Date Analyzed : 06/08/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1300

Client Sample No.: AR1660L3BY Date Analyzed : 06/08/01

Lab Sample ID : 5-445-6 Time Analyzed : 1346

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.42	8.37	8.47	536608	555754	3.4
Aroclor 1016 #2	9.28	9.23	9.33	680070	732822	7.2
Aroclor 1016 #3	10.58	10.53	10.63	843515	1141390	26.1*
Aroclor 1016 #4	11.21	11.15	11.25	566778	629557	10.0
Aroclor 1016 #5	11.65	11.59	11.69	574383	630608	8.9
Aroclor 1260 #1	14.33	14.26	14.36	1306825	1249180	4.6
Aroclor 1260 #2	14.82	14.75	14.85	1636675	1699830	3.7
Aroclor 1260 #3	15.27	15.20	15.30	1480808	1569470	5.7
Aroclor 1260 #4	15.73	15.67	15.77	867423	762453	13.8
Aroclor 1260 #5	16.17	16.11	16.21	1494283	1608200	7.1

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32 (mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No. (PIBLK): PIBLKAM Date Analyzed : 06/08/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1300

Client Sample No.: AR1660L3BY Date Analyzed : 06/08/01

Lab Sample ID : 5-445-6 Time Analyzed : 1346

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.89	8.84	8.94	449170	469705	4.4
Aroclor 1016 #2	9.87	9.82	9.92	1152140	1097160	5.0
Aroclor 1016 #3	10.85	10.80	10.90	1779858	1875290	5.1
Aroclor 1016 #4	11.18	11.12	11.22	426630	623733	31.6*
Aroclor 1016 #5	12.30	12.24	12.34	589158	656998	10.3
Aroclor 1260 #1	14.44	14.38	14.48	651963	722409	9.8
Aroclor 1260 #2	14.73	14.67	14.77	1094103	1189130	8.0
Aroclor 1260 #3	14.93	14.87	14.97	1218133	1362090	10.6
Aroclor 1260 #4	16.09	16.04	16.14	685420	786422	12.8
Aroclor 1260 #5	16.32	16.27	16.37	1454330	1867810	22.1*

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAF Date Analyzed : 06/08/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2033

Client Sample No.: AR1660L3BJ Date Analyzed : 06/08/01

Lab Sample ID : 5-445-6 Time Analyzed : 2056

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.42	8.37	8.47	553728	555754	0.4
Aroclor 1016 #2	9.28	9.23	9.33	702018	732822	4.2
Aroclor 1016 #3	10.58	10.53	10.63	873938	1141390	23.4*
Aroclor 1016 #4	11.21	11.15	11.25	584360	629557	7.2
Aroclor 1016 #5	11.65	11.59	11.69	587488	630608	6.8
Aroclor 1260 #1	14.33	14.26	14.36	1399988	1249180	12.1
Aroclor 1260 #2	14.82	14.75	14.85	1792325	1699830	5.4
Aroclor 1260 #3	15.27	15.20	15.30	1650905	1569470	5.2
Aroclor 1260 #4	15.73	15.67	15.77	977258	762453	28.2*
Aroclor 1260 #5	16.17	16.11	16.21	1729803	1608200	7.6

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No. (PIBLK): PIBLKAF Date Analyzed : 06/08/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2033

Client Sample No.: AR1660L3BJ Date Analyzed : 06/08/01

Lab Sample ID : 5-445-6 Time Analyzed : 2056

COMPOUND	RT	RT WINDOW		CALIB.	MEAN	%D	
		FROM	TO	FACTOR	CALIB. FACTOR	#	
Aroclor 1016 #1	8.89	8.84	8.94	465190	469705	1.0	
Aroclor 1016 #2	9.87	9.82	9.92	1226668	1097160	11.8	
Aroclor 1016 #3	10.85	10.80	10.90	1903530	1875290	1.5	
Aroclor 1016 #4	11.18	11.12	11.22	463690	623733	25.6*	
Aroclor 1016 #5	12.30	12.24	12.34	648503	656998	1.3	
Aroclor 1260 #1	14.44	14.38	14.48	753360	722409	4.3	
Aroclor 1260 #2	14.73	14.67	14.77	1263910	1189130	6.3	
Aroclor 1260 #3	14.93	14.87	14.97	1441063	1362090	5.8	
Aroclor 1260 #4	16.09	16.04	16.14	820680	786422	4.4	
Aroclor 1260 #5	16.32	16.27	16.37	1778635	1867810	4.8	

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAG Date Analyzed : 06/09/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0220

Client Sample No.: AR1660L3BL Date Analyzed : 06/09/01

Lab Sample ID : 5-445-6 Time Analyzed : 0243

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.42	8.37	8.47	552585	555754	0.6
Aroclor 1016 #2	9.27	9.23	9.33	703975	732822	3.9
Aroclor 1016 #3	10.58	10.53	10.63	828670	1141390	27.4*
Aroclor 1016 #4	11.20	11.15	11.25	567198	629557	9.9
Aroclor 1016 #5	11.65	11.59	11.69	574975	630608	8.8
Aroclor 1260 #1	14.32	14.26	14.36	1424673	1249180	14.0
Aroclor 1260 #2	14.82	14.75	14.85	1729525	1699830	1.8
Aroclor 1260 #3	15.26	15.20	15.30	1568193	1569470	0.1
Aroclor 1260 #4	15.72	15.67	15.77	951428	762453	24.8*
Aroclor 1260 #5	16.17	16.11	16.21	1539420	1608200	4.3

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32 (mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No. (PIBLK): PIBLKAG Date Analyzed : 06/09/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0220

Client Sample No.: AR1660L3BL Date Analyzed : 06/09/01

Lab Sample ID : 5-445-6 Time Analyzed : 0243

COMPOUND	RT	RT	WINDOW	CALIB.	MEAN	%D	#
	FROM	TO		FACTOR	CALIB.		
Aroclor 1016 #1	8.89	8.84	8.94	4999381	469705	6.4	
Aroclor 1016 #2	9.87	9.82	9.92	13238381	1097160	20.7*	
Aroclor 1016 #3	10.85	10.80	10.90	19673001	1875290	4.9	
Aroclor 1016 #4	11.17	11.12	11.22	4451351	623733	28.6*	
Aroclor 1016 #5	12.30	12.24	12.34	6484381	656998	1.3	
Aroclor 1260 #1	14.44	14.38	14.48	7617081	722409	5.4	
Aroclor 1260 #2	14.73	14.67	14.77	12861201	1189130	8.2	
Aroclor 1260 #3	14.93	14.87	14.97	13940231	1362090	2.3	
Aroclor 1260 #4	16.09	16.04	16.14	8193001	786422	4.2	
Aroclor 1260 #5	16.32	16.27	16.37	16522131	1867810	11.5	

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32 (mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAH Date Analyzed : 06/09/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0743

Client Sample No.: AR1660L3BN Date Analyzed : 06/09/01

Lab Sample ID : 5-445-6 Time Analyzed : 0806

COMPOUND	RT	FROM	TO	CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
Aroclor 1016 #1	8.42	8.37	8.47	545170	555754	1.9
Aroclor 1016 #2	9.27	9.23	9.33	716168	732822	2.3
Aroclor 1016 #3	10.58	10.53	10.63	789523	1141390	30.8*
Aroclor 1016 #4	11.20	11.15	11.25	556750	629557	11.6
Aroclor 1016 #5	11.65	11.59	11.69	525458	630608	16.7*
Aroclor 1260 #1	14.33	14.26	14.36	1448213	1249180	15.9*
Aroclor 1260 #2	14.82	14.75	14.85	1680458	1699830	1.1
Aroclor 1260 #3	15.27	15.20	15.30	1486820	1569470	5.3
Aroclor 1260 #4	15.72	15.67	15.77	916188	762453	20.2*
Aroclor 1260 #5	16.17	16.11	16.21	1454230	1608200	9.6

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32 (mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No. (PIBLK): PIBLKAH Date Analyzed : 06/09/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0743

Client Sample No.: AR1660L3BN Date Analyzed : 06/09/01

Lab Sample ID : 5-445-6 Time Analyzed : 0806

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN		%D #
		FROM	TO		CALIB. FACTOR	%D #	
Aroclor 1016 #1	8.89	8.84	8.94	506795	469705	7.9	
Aroclor 1016 #2	9.87	9.82	9.92	1396723	1097160	27.3*	
Aroclor 1016 #3	10.85	10.80	10.90	2052445	1875290	9.4	
Aroclor 1016 #4	11.17	11.12	11.22	452253	623733	27.5*	
Aroclor 1016 #5	12.30	12.24	12.34	643883	656998	2.0	
Aroclor 1260 #1	14.44	14.38	14.48	762300	722409	5.5	
Aroclor 1260 #2	14.73	14.67	14.77	1292640	1189130	8.7	
Aroclor 1260 #3	14.93	14.87	14.97	1427060	1362090	4.8	
Aroclor 1260 #4	16.09	16.04	16.14	808655	786422	2.8	
Aroclor 1260 #5	16.32	16.27	16.37	1593655	1867810	14.7	

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

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MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAI Date Analyzed : 06/09/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1307

Client Sample No.: AR1660L3BP Date Analyzed : 06/09/01

Lab Sample ID : 5-445-6 Time Analyzed : 1330

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.42	8.37	8.47	568958	555754	2.4
Aroclor 1016 #2	9.28	9.23	9.33	733208	732822	0.1
Aroclor 1016 #3	10.58	10.53	10.63	844490	1141390	26.0*
Aroclor 1016 #4	11.21	11.15	11.25	580130	629557	7.9
Aroclor 1016 #5	11.65	11.59	11.69	572220	630608	9.3
Aroclor 1260 #1	14.33	14.26	14.36	1520663	1249180	21.7*
Aroclor 1260 #2	14.82	14.75	14.85	1823525	1699830	7.3
Aroclor 1260 #3	15.27	15.20	15.30	1641060	1569470	4.6
Aroclor 1260 #4	15.73	15.67	15.77	999860	762453	31.1*
Aroclor 1260 #5	16.17	16.11	16.21	1632253	1608200	1.5

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

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7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAI Date Analyzed : 06/09/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1307

Client Sample No.: AR1660L3BP Date Analyzed : 06/09/01

Lab Sample ID : 5-445-6 Time Analyzed : 1330

COMPOUND	RT	RT	WINDOW	FROM	TO	CALIB.	MEAN	%D
						FACTOR	CALIB.	#
Aroclor 1016 #1	8.89	8.84	8.94			522868	469705	11.3
Aroclor 1016 #2	9.87	9.82	9.92			1300275	1097160	18.5*
Aroclor 1016 #3	10.85	10.80	10.90			1961940	1875290	4.6
Aroclor 1016 #4	11.18	11.12	11.22			427353	623733	31.5*
Aroclor 1016 #5	12.30	12.24	12.34			668640	656998	1.8
Aroclor 1260 #1	14.45	14.38	14.48			794418	722409	10.0
Aroclor 1260 #2	14.73	14.67	14.77			1600050	1189130	34.6*
Aroclor 1260 #3	14.93	14.87	14.97			1521605	1362090	11.7
Aroclor 1260 #4	16.09	16.04	16.14			900860	786422	14.6
Aroclor 1260 #5	16.32	16.27	16.37			1809863	1867810	3.1

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

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7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAJ Date Analyzed : 06/09/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1940

Client Sample No.: AR1660L3BR Date Analyzed : 06/09/01

Lab Sample ID : 5-445-6 Time Analyzed : 2003

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.42	8.37	8.47	592613	555754	6.6
Aroclor 1016 #2	9.28	9.23	9.33	691760	732822	5.6
Aroclor 1016 #3	10.58	10.53	10.63	788188	1141390	30.9*
Aroclor 1016 #4	11.21	11.15	11.25	591763	629557	6.0
Aroclor 1016 #5	11.66	11.59	11.69	590383	630608	6.4
Aroclor 1260 #1	14.33	14.26	14.36	1376773	1249180	10.2
Aroclor 1260 #2	14.82	14.75	14.85	1638613	1699830	3.6
Aroclor 1260 #3	15.27	15.20	15.30	1471290	1569470	6.3
Aroclor 1260 #4	15.73	15.67	15.77	900190	762453	18.1*
Aroclor 1260 #5	16.17	16.11	16.21	1437470	1608200	10.6

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

202

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No. (PIBLK): PIBLK AJ Date Analyzed : 06/09/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1940

Client Sample No.: AR1660L3BR Date Analyzed : 06/09/01

Lab Sample ID : 5-445-6 Time Analyzed : 2003

COMPOUND	RT	RT WINDOW	CALIB.	MEAN	%D
	FROM	TO	FACTOR	CALIB. FACTOR	#
Aroclor 1016 #1	8.89	8.84 8.94	459388	469705	2.2
Aroclor 1016 #2	9.87	9.82 9.92	1158973	1097160	5.6
Aroclor 1016 #3	10.85	10.80 10.90	1773530	1875290	5.4
Aroclor 1016 #4	11.18	11.12 11.22	377678	623733	39.4*
Aroclor 1016 #5	12.31	12.24 12.34	606848	656998	7.6
Aroclor 1260 #1	14.45	14.38 14.48	716810	722409	0.8
Aroclor 1260 #2	14.73	14.67 14.77	1225145	1189130	3.0
Aroclor 1260 #3	14.93	14.87 14.97	1351593	1362090	0.8
Aroclor 1260 #4	16.09	16.04 16.14	770850	786422	2.0
Aroclor 1260 #5	16.32	16.27 16.37	1543533	1867810	17.4*

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

203

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAK Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0018

Client Sample No.: AR1660L3BT Date Analyzed : 06/10/01

Lab Sample ID : 5-445-6 Time Analyzed : 0041

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.42	8.37	8.47	602063	555754	8.3
Aroclor 1016 #2	9.28	9.23	9.33	720500	732822	1.7
Aroclor 1016 #3	10.58	10.53	10.63	816263	1141390	28.5*
Aroclor 1016 #4	11.21	11.15	11.25	592748	629557	5.9
Aroclor 1016 #5	11.65	11.59	11.69	578980	630608	8.2
Aroclor 1260 #1	14.33	14.26	14.36	1445868	1249180	15.7*
Aroclor 1260 #2	14.82	14.75	14.85	1734100	1699830	2.0
Aroclor 1260 #3	15.27	15.20	15.30	1584595	1569470	1.0
Aroclor 1260 #4	15.72	15.67	15.77	1005780	762453	31.9*
Aroclor 1260 #5	16.17	16.11	16.21	1615655	1608200	0.5

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

204

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 05/30/01 05/30/01

Client Sample No.(PIBLK): PIBLKAK Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0018

Client Sample No.: AR1660L3BT Date Analyzed : 06/10/01

Lab Sample ID : 5-445-6 Time Analyzed : 0041

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN		%D #
		FROM	TO		CALIB. FACTOR	%D #	
Aroclor 1016 #1	8.89	8.84	8.94	498013	469705	6.0	
Aroclor 1016 #2	9.87	9.82	9.92	1229013	1097160	12.0	
Aroclor 1016 #3	10.85	10.80	10.90	1897345	1875290	1.2	
Aroclor 1016 #4	11.17	11.12	11.22	432500	623733	30.6*	
Aroclor 1016 #5	12.30	12.24	12.34	629015	656998	4.3	
Aroclor 1260 #1	14.44	14.38	14.48	771635	722409	6.8	
Aroclor 1260 #2	14.73	14.67	14.77	1298860	1189130	9.2	
Aroclor 1260 #3	14.93	14.87	14.97	1478023	1362090	8.5	
Aroclor 1260 #4	16.09	16.04	16.14	862360	786422	9.7	
Aroclor 1260 #5	16.32	16.27	16.37	1735843	1867810	7.1	

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/12/01 06/12/01

Client Sample No.(PIBLK): PIBLK5H Date Analyzed : 06/13/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0551

Client Sample No.: AR1660L35N Date Analyzed : 06/13/01

Lab Sample ID : 5-29-7 Time Analyzed : 0614

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.42	8.38	8.48	577308	560420	3.0
Aroclor 1016 #2	9.28	9.24	9.34	588620	647761	9.1
Aroclor 1016 #3	10.58	10.54	10.64	575653	694796	17.1*
Aroclor 1016 #4	11.21	11.17	11.27	476235	545280	12.7
Aroclor 1016 #5	11.65	11.61	11.71	423355	515344	17.8*
Aroclor 1260 #1	14.34	14.29	14.39	1487973	1574510	5.5
Aroclor 1260 #2	14.83	14.78	14.88	1361323	1575260	13.6
Aroclor 1260 #3	15.28	15.23	15.33	1183783	1448440	18.3*
Aroclor 1260 #4	15.74	15.69	15.79	961410	1072730	10.4
Aroclor 1260 #5	16.18	16.13	16.23	1247675	1620470	23.0*

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

206

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 06/12/01 06/12/01

Client Sample No.(PIBLK): PIBLK5H Date Analyzed : 06/13/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0551

Client Sample No.: AR1660L35N Date Analyzed : 06/13/01

Lab Sample ID : 5-29-7 Time Analyzed : 0614

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.89	8.85	8.95	381740	419149	8.9
Aroclor 1016 #2	9.88	9.83	9.93	1079988	1029060	5.0
Aroclor 1016 #3	10.85	10.81	10.91	1345125	1405580	4.3
Aroclor 1016 #4	11.18	11.14	11.24	298118	350241	14.9
Aroclor 1016 #5	12.31	12.27	12.37	408060	412362	1.0
Aroclor 1260 #1	14.46	14.41	14.51	557145	574197	3.0
Aroclor 1260 #2	14.74	14.69	14.79	1310413	1311860	0.1
Aroclor 1260 #3	14.94	14.89	14.99	1097453	1205920	9.0
Aroclor 1260 #4	16.10	16.05	16.15	650368	690417	5.8
Aroclor 1260 #5	16.33	16.29	16.39	1227903	1367640	10.2

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

207

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/12/01 06/12/01

Client Sample No.(PIBLK): PIBLK5I Date Analyzed : 06/13/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1226

Client Sample No.: AR1660L35P Date Analyzed : 06/13/01

Lab Sample ID : 5-29-7 Time Analyzed : 1249

COMPOUND	RT	RT WINDOW	CALIB.	MEAN	%D
	FROM	TO	FACTOR	CALIB.	#
Aroclor 1016 #1	8.43	8.38 8.48	618733	560420	10.4
Aroclor 1016 #2	9.29	9.24 9.34	577090	647761	10.9
Aroclor 1016 #3	10.59	10.54 10.64	592120	694796	14.8
Aroclor 1016 #4	11.22	11.17 11.27	479590	545280	12.0
Aroclor 1016 #5	11.66	11.61 11.71	338553	515344	34.3*
Aroclor 1260 #1	14.35	14.29 14.39	1686753	1574510	7.1
Aroclor 1260 #2	14.84	14.78 14.88	1568413	1575260	0.4
Aroclor 1260 #3	15.29	15.23 15.33	1387418	1448440	4.2
Aroclor 1260 #4	15.74	15.69 15.79	1120548	1072730	4.5
Aroclor 1260 #5	16.18	16.13 16.23	1376195	1620470	15.1*

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32 (mm) Init. Calib Date(s): 06/12/01 06/12/01

Client Sample No. (PIBLK): PIBLK5I Date Analyzed : 06/13/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1226

Client Sample No.: AR1660L35P Date Analyzed : 06/13/01

Lab Sample ID : 5-29-7 Time Analyzed : 1249

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.90	8.85	8.95	434728	419149	3.7
Aroclor 1016 #2	9.88	9.83	9.93	1158050	1029060	12.5
Aroclor 1016 #3	10.86	10.81	10.91	1452898	1405580	3.4
Aroclor 1016 #4	11.18	11.14	11.24	297680	350241	15.0
Aroclor 1016 #5	12.33	12.27	12.37	430660	412362	4.4
Aroclor 1260 #1	14.46	14.41	14.51	685850	574197	19.4*
Aroclor 1260 #2	14.75	14.69	14.79	1557430	1311860	18.7*
Aroclor 1260 #3	14.95	14.89	14.99	1331405	1205920	10.4
Aroclor 1260 #4	16.11	16.05	16.15	765523	690417	10.9
Aroclor 1260 #5	16.34	16.29	16.39	1358065	1367640	0.7

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

209

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17MS ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5L Date Analyzed : 06/15/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1033

Client Sample No.: AR1660L35W Date Analyzed : 06/15/01

Lab Sample ID : 5-29-7 Time Analyzed : 1056

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	8.42	8.37	8.47	712440	660270	7.9
Aroclor 1016 #2	9.28	9.22	9.32	886645	841722	5.3
Aroclor 1016 #3	10.58	10.53	10.63	1229533	1129600	8.9
Aroclor 1016 #4	11.20	11.15	11.25	722658	721144	0.2
Aroclor 1016 #5	11.64	11.59	11.69	742120	697156	6.5
Aroclor 1260 #1	14.32	14.26	14.36	1696460	1626600	4.3
Aroclor 1260 #2	14.81	14.76	14.86	2314280	2187220	5.8
Aroclor 1260 #3	15.26	15.21	15.31	2171103	2086120	4.1
Aroclor 1260 #4	15.72	15.67	15.77	1207318	1191240	1.4
Aroclor 1260 #5	16.16	16.11	16.21	2455035	2370010	3.6

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-XLB ID: 0.32(mm) Init. Calib Date(s): 06/15/01 06/15/01

Client Sample No.(PIBLK): PIBLK5L Date Analyzed : 06/15/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1033

Client Sample No.: AR1660L35W Date Analyzed : 06/15/01

Lab Sample ID : 5-29-7 Time Analyzed : 1056

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D	#
		FROM	TO				
Aroclor 1016 #1	8.89	8.84	8.94	586873	528446	11.0	
Aroclor 1016 #2	9.88	9.83	9.93	1360530	1241680	9.6	
Aroclor 1016 #3	10.86	10.81	10.91	2204525	1998910	10.3	
Aroclor 1016 #4	11.18	11.13	11.23	697078	632146	10.3	
Aroclor 1016 #5	12.30	12.25	12.35	758410	696314	8.9	
Aroclor 1260 #1	14.44	14.39	14.49	925905	860037	7.7	
Aroclor 1260 #2	14.73	14.68	14.78	1542920	1436240	7.4	
Aroclor 1260 #3	14.93	14.88	14.98	1813313	1699500	6.7	
Aroclor 1260 #4	16.10	16.05	16.15	995310	975397	2.0	
Aroclor 1260 #5	16.33	16.28	16.38	2526308	2364590	6.8	

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3E Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1108

Client Sample No.: AR1660L33F Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 1132

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	7.64	7.58	7.68	498680	397096	25.6*
Aroclor 1016 #2	8.32	8.27	8.37	1397588	1127350	24.0*
Aroclor 1016 #3	8.76	8.71	8.81	750390	620391	21.0*
Aroclor 1016 #4	9.58	9.53	9.63	877455	887404	1.1
Aroclor 1016 #5	10.20	10.15	10.25	1118875	1017290	10.0
Aroclor 1260 #1	12.16	12.11	12.21	1362250	1282400	6.2
Aroclor 1260 #2	12.53	12.49	12.59	1480125	1257820	17.7*
Aroclor 1260 #3	13.15	13.10	13.20	2373338	2018620	17.6*
Aroclor 1260 #4	13.67	13.62	13.72	797410	685240	16.4*
Aroclor 1260 #5	14.14	14.10	14.20	1984038	1611050	23.2*

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

212

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-1701 ID: 0.32 (mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3E Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1108

Client Sample No.: AR1660L33F Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 1132

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	7.80	7.75	7.85	237350	170178	39.5*
Aroclor 1016 #2	8.60	8.55	8.65	586720	503829	16.4*
Aroclor 1016 #3	9.16	9.10	9.20	254765	215971	18.0*
Aroclor 1016 #4	9.88	9.83	9.93	439980	371461	18.4*
Aroclor 1016 #5	11.17	11.12	11.22	294293	261412	12.6
Aroclor 1260 #1	12.49	12.44	12.54	827900	702400	17.9*
Aroclor 1260 #2	12.63	12.58	12.68	882190	745790	18.3*
Aroclor 1260 #3	13.42	13.37	13.47	869215	1095230	20.6*
Aroclor 1260 #4	14.05	14.00	14.10	591995	472231	25.4*
Aroclor 1260 #5	14.28	14.24	14.34	1371545	1120380	22.4*

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3E Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1108

Client Sample No.: AR1660L33G Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 1157

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D	#
		FROM	TO				
Aroclor 1016 #1	7.64	7.58	7.68	460750	397096	16.0*	
Aroclor 1016 #2	8.32	8.27	8.37	1301535	1127350	15.4*	
Aroclor 1016 #3	8.76	8.71	8.81	693705	620391	11.8	
Aroclor 1016 #4	9.58	9.53	9.63	843260	887404	5.0	
Aroclor 1016 #5	10.20	10.15	10.25	1066678	1017290	4.9	
Aroclor 1260 #1	12.16	12.11	12.21	1274093	1282400	0.6	
Aroclor 1260 #2	12.53	12.49	12.59	1363148	1257820	8.4	
Aroclor 1260 #3	13.15	13.10	13.20	2199318	2018620	8.9	
Aroclor 1260 #4	13.67	13.62	13.72	745098	685240	8.7	
Aroclor 1260 #5	14.14	14.10	14.20	1826930	1611050	13.4	

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

214

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-1701 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3E Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1108

Client Sample No.: AR1660L33G Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 1157

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	7.80	7.75	7.85	221433	170178	30.1*
Aroclor 1016 #2	8.60	8.55	8.65	553995	503829	10.0
Aroclor 1016 #3	9.16	9.10	9.20	241925	215971	12.0
Aroclor 1016 #4	9.88	9.83	9.93	411433	371461	10.8
Aroclor 1016 #5	11.17	11.12	11.22	278735	261412	6.6
Aroclor 1260 #1	12.49	12.44	12.54	784598	702400	11.7
Aroclor 1260 #2	12.63	12.58	12.68	827975	745790	11.0
Aroclor 1260 #3	13.41	13.37	13.47	823530	1095230	24.8*
Aroclor 1260 #4	14.05	14.00	14.10	443858	472231	6.0
Aroclor 1260 #5	14.28	14.24	14.34	1271870	1120380	13.5

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3F Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1515

Client Sample No.: AR1660L33H Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 1540

COMPOUND	RT	FROM	TO	CALIB.	MEAN	%D
				FACTOR	CALIB. FACTOR	#
Aroclor 1016 #1	7.64	7.58	7.68	425548	397096	7.2
Aroclor 1016 #2	8.32	8.27	8.37	1177065	1127350	4.4
Aroclor 1016 #3	8.76	8.71	8.81	663225	620391	6.9
Aroclor 1016 #4	9.57	9.53	9.63	832828	887404	6.2
Aroclor 1016 #5	10.20	10.15	10.25	1079243	1017290	6.1
Aroclor 1260 #1	12.16	12.11	12.21	1260435	1282400	1.7
Aroclor 1260 #2	12.54	12.49	12.59	1309150	1257820	4.1
Aroclor 1260 #3	13.15	13.10	13.20	2107725	2018620	4.4
Aroclor 1260 #4	13.67	13.62	13.72	733560	685240	7.1
Aroclor 1260 #5	14.14	14.10	14.20	1715725	1611050	6.5

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-1701 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3F Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1515

Client Sample No.: AR1660L33H Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 1540

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D	#
		FROM	TO				
Aroclor 1016 #1	7.80	7.75	7.85	202948	170178	19.2*	
Aroclor 1016 #2	8.60	8.55	8.65	506780	503829	0.6	
Aroclor 1016 #3	9.16	9.10	9.20	222015	215971	2.8	
Aroclor 1016 #4	9.88	9.83	9.93	368780	371461	0.7	
Aroclor 1016 #5	11.17	11.12	11.22	258730	261412	1.0	
Aroclor 1260 #1	12.49	12.44	12.54	733040	702400	4.4	
Aroclor 1260 #2	12.63	12.58	12.68	770803	745790	3.4	
Aroclor 1260 #3	13.41	13.37	13.47	1133388	1095230	3.5	
Aroclor 1260 #4	14.05	14.00	14.10	409455	472231	13.3	
Aroclor 1260 #5	14.28	14.24	14.34	1197270	1120380	6.9	

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3G Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2127

Client Sample No.: AR1660L33J Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 2151

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D	#
		FROM	TO				
Aroclor 1016 #1	NA	NA	NA	NA	NA	NA	
Aroclor 1016 #2	NA	NA	NA	NA	NA	NA	
Aroclor 1016 #3	NA	NA	NA	NA	NA	NA	
Aroclor 1016 #4	NA	NA	NA	NA	NA	NA	
Aroclor 1016 #5	NA	NA	NA	NA	NA	NA	
Aroclor 1260 #1	NA	NA	NA	NA	NA	NA	
Aroclor 1260 #2	NA	NA	NA	NA	NA	NA	
Aroclor 1260 #3	NA	NA	NA	NA	NA	NA	
Aroclor 1260 #4	NA	NA	NA	NA	NA	NA	
Aroclor 1260 #5	NA	NA	NA	NA	NA	NA	

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-1701 ID: 0.32 (mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No. (PIBLK): PIBLK3G Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2127

Client Sample No.: AR1660L33J Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 2151

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D	#
		FROM	TO				
Aroclor 1016 #1	NA	NA	NA	NA	NA	NA	NA
Aroclor 1016 #2	NA	NA	NA	NA	NA	NA	NA
Aroclor 1016 #3	NA	NA	NA	NA	NA	NA	NA
Aroclor 1016 #4	NA	NA	NA	NA	NA	NA	NA
Aroclor 1016 #5	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260 #1	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260 #2	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260 #3	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260 #4	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260 #5	NA	NA	NA	NA	NA	NA	NA

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3G Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2127

Client Sample No.: AR1660L33K Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 2216

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	7.65	7.58	7.68	457288	397096	15.2*
Aroclor 1016 #2	8.32	8.27	8.37	1279910	1127350	13.5
Aroclor 1016 #3	8.76	8.71	8.81	672033	620391	8.3
Aroclor 1016 #4	9.58	9.53	9.63	816833	887404	8.0
Aroclor 1016 #5	10.21	10.15	10.25	1020453	1017290	0.3
Aroclor 1260 #1	12.16	12.11	12.21	1331533	1282400	3.8
Aroclor 1260 #2	12.54	12.49	12.59	1348598	1257820	7.2
Aroclor 1260 #3	13.15	13.10	13.20	2175660	2018620	7.8
Aroclor 1260 #4	13.67	13.62	13.72	748978	685240	9.3
Aroclor 1260 #5	14.15	14.10	14.20	1816413	1611050	12.7

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-1701 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3G Date Analyzed : 06/10/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 2127

Client Sample No.: AR1660L33K Date Analyzed : 06/10/01

Lab Sample ID : 5-29-7 Time Analyzed : 2216

COMPOUND	RT	RT WINDOW		CALIB.	MEAN	CALIB.	%D
		FROM	TO				
Aroclor 1016 #1	7.80	7.75	7.85	220288	170178	29.4*	
Aroclor 1016 #2	8.60	8.55	8.65	539458	503829	7.1	
Aroclor 1016 #3	9.16	9.10	9.20	235448	215971	9.0	
Aroclor 1016 #4	9.88	9.83	9.93	382955	371461	3.1	
Aroclor 1016 #5	11.18	11.12	11.22	270738	261412	3.6	
Aroclor 1260 #1	12.49	12.44	12.54	756855	702400	7.8	
Aroclor 1260 #2	12.63	12.58	12.68	799085	745790	7.2	
Aroclor 1260 #3	13.42	13.37	13.47	1152373	1095230	5.2	
Aroclor 1260 #4	14.05	14.00	14.10	530385	472231	12.3	
Aroclor 1260 #5	14.29	14.24	14.34	1221200	1120380	9.0	

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17 ID: 0.32 (mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No. (PIBLK): PIBLK3L Date Analyzed : 06/12/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0923

Client Sample No.: AR1660L33T Date Analyzed : 06/12/01

Lab Sample ID : 5-29-7 Time Analyzed : 0948

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	7.66	7.58	7.68	527290	397096	32.8*
Aroclor 1016 #2	8.33	8.27	8.37	1160585	1127350	3.0
Aroclor 1016 #3	8.77	8.71	8.81	562043	620391	9.4
Aroclor 1016 #4	9.58	9.53	9.63	747430	887404	15.8*
Aroclor 1016 #5	10.22	10.15	10.25	1003163	1017290	1.4
Aroclor 1260 #1	12.17	12.11	12.21	1299865	1282400	1.4
Aroclor 1260 #2	12.55	12.49	12.59	1394415	1257820	10.8
Aroclor 1260 #3	13.16	13.10	13.20	2339020	2018620	15.9*
Aroclor 1260 #4	13.68	13.62	13.72	807443	685240	17.8*
Aroclor 1260 #5	14.15	14.10	14.20	1943390	1611050	20.6*

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-1701 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3L Date Analyzed : 06/12/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 0923

Client Sample No.: AR1660L33T Date Analyzed : 06/12/01

Lab Sample ID : 5-29-7 Time Analyzed : 0948

COMPOUND	RT	RT WINDOW	CALIB.	MEAN	%D
	FROM	TO	FACTOR	CALIB. FACTOR	#
Aroclor 1016 #1	7.80	7.75 7.85	228933	170178	34.5*
Aroclor 1016 #2	8.61	8.55 8.65	492813	503829	2.2
Aroclor 1016 #3	9.17	9.10 9.20	227260	215971	5.2
Aroclor 1016 #4	9.90	9.83 9.93	376240	371461	1.3
Aroclor 1016 #5	11.18	11.12 11.22	271490	261412	3.9
Aroclor 1260 #1	12.49	12.44 12.54	708880	702400	0.9
Aroclor 1260 #2	12.63	12.58 12.68	750860	745790	0.7
Aroclor 1260 #3	13.42	13.37 13.47	1183158	1095230	8.0
Aroclor 1260 #4	14.06	14.00 14.10	543085	472231	15.0
Aroclor 1260 #5	14.30	14.24 14.34	1265123	1120380	12.9

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-17 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3M Date Analyzed : 06/12/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1715

Client Sample No.: AR1660L33U Date Analyzed : 06/12/01

Lab Sample ID : 5-29-7 Time Analyzed : 1740

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	7.65	7.58	7.68	297153	397096	25.2*
Aroclor 1016 #2	8.32	8.27	8.37	1235583	1127350	9.6
Aroclor 1016 #3	8.76	8.71	8.81	607365	620391	2.1
Aroclor 1016 #4	9.56	9.53	9.63	840575	887404	5.3
Aroclor 1016 #5	10.21	10.15	10.25	1021590	1017290	0.4
Aroclor 1260 #1	12.15	12.11	12.21	1318493	1282400	2.8
Aroclor 1260 #2	12.53	12.49	12.59	1345825	1257820	7.0
Aroclor 1260 #3	13.13	13.10	13.20	2244690	2018620	11.2
Aroclor 1260 #4	13.66	13.62	13.72	779743	685240	13.8
Aroclor 1260 #5	14.13	14.10	14.20	1921050	1611050	19.2*

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

7F
MULTI-COMPONENT CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

GC Column: DB-1701 ID: 0.32(mm) Init. Calib Date(s): 06/09/01 06/09/01

Client Sample No.(PIBLK): PIBLK3M Date Analyzed : 06/12/01

Lab Sample ID (PIBLK): 5-414-6 Time Analyzed : 1715

Client Sample No.: AR1660L33U Date Analyzed : 06/12/01

Lab Sample ID : 5-29-7 Time Analyzed : 1740

COMPOUND	RT	RT WINDOW		CALIB. FACTOR	MEAN CALIB. FACTOR	%D #
		FROM	TO			
Aroclor 1016 #1	7.78	7.75	7.85	190393	170178	11.9
Aroclor 1016 #2	8.59	8.55	8.65	503493	503829	0.1
Aroclor 1016 #3	9.15	9.10	9.20	239395	215971	10.8
Aroclor 1016 #4	9.88	9.83	9.93	387248	371461	4.3
Aroclor 1016 #5	11.17	11.12	11.22	280970	261412	7.5
Aroclor 1260 #1	12.48	12.44	12.54	683385	702400	2.7
Aroclor 1260 #2	12.62	12.58	12.68	739080	745790	0.9
Aroclor 1260 #3	13.40	13.37	13.47	1154645	1095230	5.4
Aroclor 1260 #4	14.03	14.00	14.10	525235	472231	11.2
Aroclor 1260 #5	14.27	14.24	14.34	1232818	1120380	10.0

QC LIMITS: RPD of amounts of the Multi-Components must be less than or equal to 15.0%.

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-17

ID: 0.32 (mm)

Init. Calib. Date(s):

Instrument ID: HP_03A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 RESC3C	5-441-6	06/09/01	1433	6.45	17.12
02 AR1221L33C	5-420-6	06/09/01	1458	6.45	17.12
03 AR1232L33C	5-422-6	06/09/01	1523	6.44	17.12
04 AR1242L13C	5-11-7	06/09/01	1548	6.45	17.12
05 AR1242L23C	5-10-7	06/09/01	1612	6.45	17.12
06 AR1242L33C	5-9-7	06/09/01	1637	6.44	17.12
07 AR1242L43C	5-8-7	06/09/01	1702	6.44	17.12
08 AR1242L53C	5-7-7	06/09/01	1726	6.44	17.12
09 AR1248L33C	5-424-6	06/09/01	1751	6.44	17.12
10 AR1254L13C	5-6-7	06/09/01	1816	6.44	17.12
11 AR1254L23C	5-5-7	06/09/01	1841	6.45	17.12
12 AR1254L33C	5-4-7	06/09/01	1905	6.44	17.12
13 AR1254L43C	5-3-7	06/09/01	1930	6.44	17.12
14 AR1254L53C	5-2-7	06/09/01	1955	6.44	17.12
15 AR1660L13C	5-31-7	06/09/01	2019	6.45	17.12
16 AR1660L23C	5-30-7	06/09/01	2044	6.45	17.13
17 AR1660L33V	5-29-7	06/09/01	2109	6.45	17.13
18 AR1660L43C	5-28-7	06/09/01	2134	6.45	17.13
19 AR1660L53C	5-27-7	06/09/01	2158	6.45	17.13
20 PIBLK3C	5-414-6	06/09/01	2223	6.45	17.13
21 PIBLK3E	5-414-6	06/10/01	1108	6.45	17.12
22 AR1660L33F	5-29-7	06/10/01	1132	6.45	17.12
23 AR1660L33G	5-29-7	06/10/01	1157	6.45	17.12
24 PBLKSE	BL0602SE	06/10/01	1311	6.45	17.11
25 ELCS3	LC0602SE	06/10/01	1401	6.45	17.11
26 ELCS4	LD0602SE	06/10/01	1426	6.45	17.11
27 PIBLK3F	5-414-6	06/10/01	1515	6.45	17.12
28 AR1660L33H	5-29-7	06/10/01	1540	6.45	17.12
29 E30J0	46676.23	06/10/01	1629	6.45	17.10
30 E30J1	46676.24	06/10/01	1654	6.45	17.11
31 E30J2	46676.25	06/10/01	1719	6.44	17.10
32 E30J3	46676.26	06/10/01	1744	6.44	17.10
33 E30J4	46676.27	06/10/01	1808	6.45	17.11
34 PIBLK3G	5-414-6	06/10/01	2127	6.45	17.12
35 AR1660L33J	5-29-7	06/10/01	2151	0.00	0.00

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-17

ID: 0.32 (mm)

Init. Calib. Date(s):

Instrument ID: HP_03A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 AR1660L33K	5-29-7	06/10/01	2216	6.45	17.12
02 PIBLK3L	5-414-6	06/12/01	0923	6.46	17.13
03 AR1660L33T	5-29-7	06/12/01	0948	6.46	17.13
04 E30J0DL	46676.23DL	06/12/01	1217	6.47	17.15
05 E30J1DL	46676.24DL	06/12/01	1242	6.46	17.12
06 E30J2DL	46676.25DL	06/12/01	1306	6.45	17.11
07 E30J3DL	46676.26DL	06/12/01	1331	6.45	17.10
08 PIBLK3M	5-414-6	06/12/01	1715	6.44	17.09
09 AR1660L33U	5-29-7	06/12/01	1740	6.44	17.09
10					
11					
12					
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34					
35					

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-1701 ID: 0.32 (mm) Init. Calib. Date(s):

Instrument ID: HP_03B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 RESC3C	5-441-6	06/09/01	1433	6.47	18.41
02 AR1221L33C	5-420-6	06/09/01	1458	6.47	18.41
03 AR1232L33C	5-422-6	06/09/01	1523	6.47	18.41
04 AR1242L13C	5-11-7	06/09/01	1548	6.47	18.41
05 AR1242L23C	5-10-7	06/09/01	1612	6.47	18.41
06 AR1242L33C	5-9-7	06/09/01	1637	6.47	18.41
07 AR1242L43C	5-8-7	06/09/01	1702	6.47	18.41
08 AR1242L53C	5-7-7	06/09/01	1726	6.47	18.41
09 AR1248L33C	5-424-6	06/09/01	1751	6.47	18.41
10 AR1254L13C	5-6-7	06/09/01	1816	6.47	18.41
11 AR1254L23C	5-5-7	06/09/01	1841	6.47	18.41
12 AR1254L33C	5-4-7	06/09/01	1905	6.47	18.41
13 AR1254L43C	5-3-7	06/09/01	1930	6.47	18.41
14 AR1254L53C	5-2-7	06/09/01	1955	6.47	18.41
15 AR1660L13C	5-31-7	06/09/01	2019	6.47	18.42
16 AR1660L23C	5-30-7	06/09/01	2044	6.47	18.42
17 AR1660L33V	5-29-7	06/09/01	2109	6.47	18.42
18 AR1660L43C	5-28-7	06/09/01	2134	6.47	18.42
19 AR1660L53C	5-27-7	06/09/01	2158	6.47	18.42
20 PIBLK3C	5-414-6	06/09/01	2223	6.47	18.42
21 PIBLK3E	5-414-6	06/10/01	1108	6.47	18.42
22 AR1660L33F	5-29-7	06/10/01	1132	6.47	18.42
23 AR1660L33G	5-29-7	06/10/01	1157	6.47	18.41
24 PBLKSE	BL0602SE	06/10/01	1311	6.47	18.41
25 ELCS3	LC0602SE	06/10/01	1401	6.47	18.41
26 ELCS4	LD0602SE	06/10/01	1426	6.47	18.41
27 PIBLK3F	5-414-6	06/10/01	1515	6.47	18.41
28 AR1660L33H	5-29-7	06/10/01	1540	6.47	18.41
29 E30J0	46676.23	06/10/01	1629	6.47	18.40
30 E30J1	46676.24	06/10/01	1654	6.47	18.40
31 E30J2	46676.25	06/10/01	1719	6.47	18.40
32 E30J3	46676.26	06/10/01	1744	6.47	18.40
33 E30J4	46676.27	06/10/01	1808	6.47	18.40
34 PIBLK3G	5-414-6	06/10/01	2127	6.47	18.42
35 AR1660L33J	5-29-7	06/10/01	2151	0.00	0.00

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-1701 ID: 0.32 (mm) Init. Calib. Date(s):

Instrument ID: HP_03B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 AR1660L33K	5-29-7	06/10/01	2216	6.47	18.42
02 PIBLK3L	5-414-6	06/12/01	0923	6.48	18.43
03 AR1660L33T	5-29-7	06/12/01	0948	6.48	18.43
04 E30J0DL	46676.23DL	06/12/01	1217	6.48	18.44
05 E30J1DL	46676.24DL	06/12/01	1242	6.48	18.41
06 E30J2DL	46676.25DL	06/12/01	1306	6.47	18.40
07 E30J3DL	46676.26DL	06/12/01	1331	6.47	18.40
08 PIBLK3M	5-414-6	06/12/01	1715	6.46	18.38
09 AR1660L33U	5-29-7	06/12/01	1740	6.46	18.37
10					
11					
12					
13					
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16					
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34					
35					

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-17MS ID: 0.32 (mm) Init. Calib. Date(s):

Instrument ID: HP_15A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 RESC15A	5-441-6	05/30/01	1109	7.59	18.28
02 AR1221L3A	5-420-6	05/30/01	1132	7.59	18.28
03 AR1232L3A	5-422-6	05/30/01	1155	7.59	18.28
04 AR1242L1A	5-11-7	05/30/01	1218	7.59	18.28
05 AR1242L2A	5-10-7	05/30/01	1241	7.59	18.28
06 AR1242L3A	5-9-7	05/30/01	1304	7.59	18.28
07 AR1242L4A	5-8-7	05/30/01	1327	7.59	18.28
08 AR1242L5A	5-7-7	05/30/01	1351	7.59	18.28
09 AR1248L3A	5-424-6	05/30/01	1414	7.59	18.28
10 AR1254L1A	5-6-7	05/30/01	1437	7.59	18.28
11 AR1254L2A	5-5-7	05/30/01	1500	7.59	18.28
12 AR1254L3A	5-4-7	05/30/01	1523	7.59	18.28
13 AR1254L4A	5-3-7	05/30/01	1546	7.59	18.28
14 AR1254L5A	5-2-7	05/30/01	1609	7.59	18.28
15 AR1660L1A	5-447-6	05/30/01	1632	7.59	18.28
16 AR1660L2A	5-446-6	05/30/01	1656	7.59	18.28
17 AR1660L3A	5-445-6	05/30/01	1719	7.59	18.28
18 AR1660L4A	5-444-6	05/30/01	1742	7.59	18.28
19 AR1660L5A	5-443-6	05/30/01	1805	7.59	18.28
20 PIBLKA	5-414-6	05/30/01	1828	7.59	18.28
21 PIBLKAM	5-414-6	06/08/01	1300	7.59	18.29
22 AR1660L3BX	5-445-6	06/08/01	1323	7.60	18.29
23 AR1660L3BY	5-445-6	06/08/01	1346	7.59	18.29
24 PBLKSD	BL0602SD	06/08/01	1705	7.59	18.29
25 ELCS1	LC0602SD	06/08/01	1838	7.60	18.29
26 ELCS2	LD0602SD	06/08/01	1901	7.59	18.29
27 PIBLKAF	5-414-6	06/08/01	2033	7.59	18.29
28 AR1660L3BJ	5-445-6	06/08/01	2056	7.59	18.29
29 E30G5	46676.06	06/08/01	2338	7.59	18.28
30 E30G6	46676.07	06/09/01	0001	7.59	18.28
31 E30G6MS	46676.08MS	06/09/01	0024	7.59	18.29
32 E30G6MSD	46676.09MSD	06/09/01	0047	7.59	18.29
33 PIBLKAG	5-414-6	06/09/01	0220	7.59	18.28
34 AR1660L3BL	5-445-6	06/09/01	0243	7.59	18.28
35 E30G7	46676.10	06/09/01	0329	7.59	18.29

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-17MS

ID: 0.32 (mm)

Init. Calib. Date(s):

Instrument ID: HP_15A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 E30G8	46676.11	06/09/01	0352	7.59	18.28
02 E30G9	46676.12	06/09/01	0415	7.59	18.28
03 E30H0	46676.13	06/09/01	0438	7.59	18.28
04 E30H1	46676.14	06/09/01	0502	7.59	18.28
05 E30H2	46676.15	06/09/01	0525	7.59	18.28
06 E30H3	46676.16	06/09/01	0548	7.59	18.28
07 E30H4	46676.17	06/09/01	0611	7.59	18.28
08 PIBLKAH	5-414-6	06/09/01	0743	7.59	18.28
09 AR1660L3BN	5-445-6	06/09/01	0806	7.59	18.28
10 E30H5	46676.18	06/09/01	0853	7.59	18.28
11 E30H6	46676.19	06/09/01	0916	7.59	18.28
12 E30H7	46676.20	06/09/01	0939	7.59	18.28
13 E30H8	46676.21	06/09/01	1002	7.59	18.28
14 E30H9	46676.22	06/09/01	1025	7.59	18.28
15 PIBLKAI	5-414-6	06/09/01	1307	7.59	18.29
16 AR1660L3BP	5-445-6	06/09/01	1330	7.59	18.29
17 E30G6DL	46676.07DL	06/09/01	1635	7.59	18.28
18 E30H1DL	46676.14DL	06/09/01	1721	7.59	18.29
19 E30H2	46676.15	06/09/01	1808	7.59	18.29
20 PIBLKAJ	5-414-6	06/09/01	1940	7.60	18.29
21 AR1660L3BR	5-445-6	06/09/01	2003	7.59	18.29
22 E30H3DL	46676.16DL	06/09/01	2049	7.60	18.29
23 E30H5DL	46676.18DL	06/09/01	2136	7.59	18.25
24 E30H6DL	46676.19DL	06/09/01	2159	7.59	18.29
25 PIBLKAK	5-414-6	06/10/01	0018	7.59	18.29
26 AR1660L3BT	5-445-6	06/10/01	0041	7.59	18.29
27					
28					
29					
30					
31					
32					
33					
34					
35					

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-XLB

ID: 0.32 (mm)

Init. Calib. Date(s):

Instrument ID: HP_15B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 RESC15A	5-441-6	05/30/01	1109	7.35	18.68
02 AR1221L3A	5-420-6	05/30/01	1132	7.35	18.68
03 AR1232L3A	5-422-6	05/30/01	1155	7.35	18.68
04 AR1242L1A	5-11-7	05/30/01	1218	7.35	18.68
05 AR1242L2A	5-10-7	05/30/01	1241	7.35	18.68
06 AR1242L3A	5-9-7	05/30/01	1304	7.35	18.68
07 AR1242L4A	5-8-7	05/30/01	1327	7.35	18.68
08 AR1242L5A	5-7-7	05/30/01	1351	7.35	18.68
09 AR1248L3A	5-424-6	05/30/01	1414	7.35	18.68
10 AR1254L1A	5-6-7	05/30/01	1437	7.35	18.68
11 AR1254L2A	5-5-7	05/30/01	1500	7.35	18.68
12 AR1254L3A	5-4-7	05/30/01	1523	7.35	18.68
13 AR1254L4A	5-3-7	05/30/01	1546	7.35	18.68
14 AR1254L5A	5-2-7	05/30/01	1609	7.35	18.68
15 AR1660L1A	5-447-6	05/30/01	1632	7.35	18.68
16 AR1660L2A	5-446-6	05/30/01	1656	7.35	18.68
17 AR1660L3A	5-445-6	05/30/01	1719	7.35	18.68
18 AR1660L4A	5-444-6	05/30/01	1742	7.35	18.68
19 AR1660L5A	5-443-6	05/30/01	1805	7.35	18.68
20 PIBLKA	5-414-6	05/30/01	1828	7.35	18.68
21 PIBLKAM	5-414-6	06/08/01	1300	7.35	18.68
22 AR1660L3BX	5-445-6	06/08/01	1323	7.35	18.68
23 AR1660L3BY	5-445-6	06/08/01	1346	7.35	18.68
24 PBLKSD	BL0602SD	06/08/01	1705	7.35	18.68
25 ELCS1	LC0602SD	06/08/01	1838	7.35	18.68
26 ELCS2	LD0602SD	06/08/01	1901	7.35	18.68
27 PIBLKAF	5-414-6	06/08/01	2033	7.35	18.68
28 AR1660L3BJ	5-445-6	06/08/01	2056	7.35	18.68
29 E30G5	46676.06	06/08/01	2338	7.35	18.68
30 E30G6	46676.07	06/09/01	0001	7.35	18.68
31 E30G6MS	46676.08MS	06/09/01	0024	7.35	18.68
32 E30G6MSD	46676.09MSD	06/09/01	0047	7.35	18.68
33 PIBLKAG	5-414-6	06/09/01	0220	7.35	18.68
34 AR1660L3BL	5-445-6	06/09/01	0243	7.35	18.68
35 E30G7	46676.10	06/09/01	0329	7.35	18.68

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-XLB

ID: 0.32 (mm)

Init. Calib. Date(s):

Instrument ID: HP_15B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 E30G8	146676.11	06/09/01	0352	7.35	18.68
02 E30G9	146676.12	06/09/01	0415	7.35	18.68
03 E30H0	146676.13	06/09/01	0438	7.35	18.68
04 E30H1	146676.14	06/09/01	0502	7.35	18.68
05 E30H2	146676.15	06/09/01	0525	7.35	18.68
06 E30H3	146676.16	06/09/01	0548	7.35	18.68
07 E30H4	146676.17	06/09/01	0611	7.35	18.65
08 PIBLKAH	15-414-6	06/09/01	0743	7.35	18.68
09 AR1660L3BN	15-445-6	06/09/01	0806	7.35	18.68
10 E30H5	146676.18	06/09/01	0853	7.35	18.65
11 E30H6	146676.19	06/09/01	0916	7.35	18.65
12 E30H7	146676.20	06/09/01	0939	7.35	18.68
13 E30H8	146676.21	06/09/01	1002	7.35	18.68
14 E30H9	146676.22	06/09/01	1025	7.35	18.68
15 PIBLKAI	15-414-6	06/09/01	1307	7.35	18.68
16 AR1660L3BP	15-445-6	06/09/01	1330	7.35	18.68
17 E30G6DL	146676.07DL	06/09/01	1635	7.35	18.68
18 E30H1DL	146676.14DL	06/09/01	1721	7.35	18.68
19 E30H2	146676.15	06/09/01	1808	7.35	18.68
20 PIBLKAJ	15-414-6	06/09/01	1940	7.36	18.68
21 AR1660L3BR	15-445-6	06/09/01	2003	7.35	18.68
22 E30H3DL	146676.16DL	06/09/01	2049	7.35	18.68
23 E30H5DL	146676.18DL	06/09/01	2136	7.35	18.65
24 E30H6DL	146676.19DL	06/09/01	2159	7.35	18.65
25 PIBLKAK	15-414-6	06/10/01	0018	7.35	18.68
26 AR1660L3BT	15-445-6	06/10/01	0041	7.35	18.68
27					
28					
29					
30					
31					
32					
33					
34					
35					

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-17MS ID: 0.32 (mm) Init. Calib. Date(s):

Instrument ID: HP_15A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 RESC5B	5-441-6	06/12/01	1422	7.59	18.29
02 AR1221L35B	5-420-6	06/12/01	1446	7.59	18.29
03 AR1232L35B	5-422-6	06/12/01	1509	7.59	18.29
04 AR1242L15B	5-11-7	06/12/01	1532	7.59	18.29
05 AR1242L25B	5-10-7	06/12/01	1555	7.59	18.30
06 AR1242L35B	5-9-7	06/12/01	1618	7.60	18.30
07 AR1242L45B	5-8-7	06/12/01	1642	7.60	18.30
08 AR1242L55B	5-7-7	06/12/01	1705	7.60	18.30
09 AR1248L35B	5-424-6	06/12/01	1728	7.60	18.30
10 AR1254L15B	5-6-7	06/12/01	1751	7.60	18.30
11 AR1254L25B	5-5-7	06/12/01	1815	7.60	18.30
12 AR1254L35B	5-4-7	06/12/01	1838	7.60	18.31
13 AR1254L45B	5-3-7	06/12/01	1901	7.60	18.31
14 AR1254L55B	5-2-7	06/12/01	1924	7.60	18.31
15 AR1660L15B	5-31-7	06/12/01	1948	7.60	18.30
16 AR1660L25B	5-30-7	06/12/01	2011	7.60	18.30
17 AR1660L35M	5-29-7	06/12/01	2034	7.60	18.30
18 AR1660L45B	5-28-7	06/12/01	2057	7.60	18.30
19 AR1660L55B	5-27-7	06/12/01	2121	7.60	18.30
20 PIBLK5G	5-414-6	06/12/01	2144	7.60	18.30
21 E30H4DL	46676.17DL	06/13/01	0418	7.59	18.22
22 PIBLK5H	5-414-6	06/13/01	0551	7.59	18.29
23 AR1660L35N	5-29-7	06/13/01	0614	7.59	18.30
24 E30H2DL	46676.15DL	06/13/01	1140	7.60	18.30
25 PIBLK5I	5-414-6	06/13/01	1226	7.60	18.30
26 AR1660L35P	5-29-7	06/13/01	1249	7.60	18.31
27					
28					
29					
30					
31					
32					
33					
34					
35					

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-XLB

ID: 0.32 (mm)

Init. Calib. Date(s):

Instrument ID: HP_15B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 RESC5B	5-441-6	06/12/01	1422	7.35	18.68
02 AR1221L35B	5-420-6	06/12/01	1446	7.35	18.69
03 AR1232L35B	5-422-6	06/12/01	1509	7.35	18.69
04 AR1242L15B	5-11-7	06/12/01	1532	7.35	18.69
05 AR1242L25B	5-10-7	06/12/01	1555	7.35	18.69
06 AR1242L35B	5-9-7	06/12/01	1618	7.36	18.69
07 AR1242L45B	5-8-7	06/12/01	1642	7.36	18.70
08 AR1242L55B	5-7-7	06/12/01	1705	7.36	18.70
09 AR1248L35B	5-424-6	06/12/01	1728	7.36	18.70
10 AR1254L15B	5-6-7	06/12/01	1751	7.36	18.70
11 AR1254L25B	5-5-7	06/12/01	1815	7.36	18.70
12 AR1254L35B	5-4-7	06/12/01	1838	7.36	18.70
13 AR1254L45B	5-3-7	06/12/01	1901	7.36	18.70
14 AR1254L55B	5-2-7	06/12/01	1924	7.37	18.70
15 AR1660L15B	5-31-7	06/12/01	1948	7.36	18.70
16 AR1660L25B	5-30-7	06/12/01	2011	7.36	18.70
17 AR1660L35M	5-29-7	06/12/01	2034	7.36	18.70
18 AR1660L45B	5-28-7	06/12/01	2057	7.36	18.70
19 AR1660L55B	5-27-7	06/12/01	2121	7.36	18.70
20 PIBLK5G	5-414-6	06/12/01	2144	7.36	18.70
21 E30H4DL	46676.17DL	06/13/01	0418	7.35	18.66
22 PIBLK5H	5-414-6	06/13/01	0551	7.35	18.69
23 AR1660L35N	5-29-7	06/13/01	0614	7.35	18.69
24 E30H2DL	46676.15DL	06/13/01	1140	7.36	18.69
25 PIBLK5I	5-414-6	06/13/01	1226	7.36	18.70
26 AR1660L35P	5-29-7	06/13/01	1249	7.36	18.70
27					
28					
29					
30					
31					
32					
33					
34					
35					

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-17MS

ID: 0.32 (mm)

Init. Calib. Date(s):

Instrument ID: HP_15A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX		DCB	
				RT	#	RT	#
01 RESC5C	5-441-6	06/14/01	1952	7.59		18.28	
02 AR1221L35C	5-420-6	06/14/01	2015	7.59		18.28	
03 AR1232L35C	5-422-6	06/14/01	2038	7.59		18.29	
04 AR1242L15C	5-11-7	06/14/01	2101	7.59		18.29	
05 AR1242L25C	5-10-7	06/14/01	2125	7.59		18.29	
06 AR1242L35C	5-9-7	06/14/01	2148	7.59		18.29	
07 AR1242L45C	5-8-7	06/14/01	2211	7.59		18.29	
08 AR1242L55C	5-7-7	06/14/01	2234	7.59		18.29	
09 AR1248L35C	5-424-6	06/14/01	2257	7.59		18.29	
10 AR1254L15C	5-6-7	06/14/01	2321	7.59		18.29	
11 AR1254L25C	5-5-7	06/14/01	2344	7.59		18.29	
12 AR1254L35C	5-4-7	06/15/01	0007	7.59		18.29	
13 AR1254L45C	5-3-7	06/15/01	0030	7.59		18.28	
14 AR1254L55C	5-2-7	06/15/01	0053	7.59		18.28	
15 AR1660L15C	5-31-7	06/15/01	0117	7.59		18.29	
16 AR1660L25C	5-30-7	06/15/01	0140	7.59		18.28	
17 AR1660L35V	5-29-7	06/15/01	0203	7.59		18.28	
18 AR1660L45C	5-28-7	06/15/01	0226	7.59		18.29	
19 AR1660L55C	5-27-7	06/15/01	0249	7.59		18.28	
20 PIBLK52	5-414-6	06/15/01	0313	7.59		18.29	
21 E30G7DL	46676.10DL	06/15/01	0555	7.59		18.28	
22 PIBLK5L	5-414-6	06/15/01	1033	7.59		18.29	
23 AR1660L35W	5-29-7	06/15/01	1056	7.59		18.28	
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

8D
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Contract: 68W99079

Lab Code: SWOK

Case No.: 29294

SAS No.:

SDG No.: E30G5

GC Column: DB-XLB

ID: 0.32(mm)

Init. Calib. Date(s):

Instrument ID: HP_15B

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01 RESC5C	5-441-6	06/14/01	1952	7.35	18.70
02 AR1221L35C	5-420-6	06/14/01	2015	7.35	18.70
03 AR1232L35C	5-422-6	06/14/01	2038	7.35	18.70
04 AR1242L15C	5-11-7	06/14/01	2101	7.36	18.70
05 AR1242L25C	5-10-7	06/14/01	2125	7.36	18.70
06 AR1242L35C	5-9-7	06/14/01	2148	7.36	18.70
07 AR1242L45C	5-8-7	06/14/01	2211	7.36	18.70
08 AR1242L55C	5-7-7	06/14/01	2234	7.36	18.70
09 AR1248L35C	5-424-6	06/14/01	2257	7.36	18.70
10 AR1254L15C	5-6-7	06/14/01	2321	7.36	18.70
11 AR1254L25C	5-5-7	06/14/01	2344	7.36	18.70
12 AR1254L35C	5-4-7	06/15/01	0007	7.35	18.70
13 AR1254L45C	5-3-7	06/15/01	0030	7.36	18.69
14 AR1254L55C	5-2-7	06/15/01	0053	7.35	18.69
15 AR1660L15C	5-31-7	06/15/01	0117	7.35	18.70
16 AR1660L25C	5-30-7	06/15/01	0140	7.35	18.70
17 AR1660L35V	5-29-7	06/15/01	0203	7.35	18.69
18 AR1660L45C	5-28-7	06/15/01	0226	7.35	18.69
19 AR1660L55C	5-27-7	06/15/01	0249	7.35	18.69
20 PIBLK52	5-414-6	06/15/01	0313	7.35	18.70
21 E30G7DL	46676.10DL	06/15/01	0555	7.35	18.69
22 PIBLK5L	5-414-6	06/15/01	1033	7.35	18.69
23 AR1660L35W	5-29-7	06/15/01	1056	7.36	18.69
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: LC0602SD Date(s) Analyzed: 06/08/01 06/08/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1254	1	12.64	12.58	12.68	101		
	2	13.33	13.26	13.36	104		
	3	13.80	13.73	13.83	99.1		
	4	14.32	14.26	14.36	116		
	5	15.01	14.94	15.04	96.4	103	
COLUMN 1							
COLUMN 2	1	12.31	12.24	12.34	102		
	2	13.04	12.96	13.06	86.6		
	3	13.94	13.87	13.97	88.3		
	4	14.93	14.87	14.97	95.9		
	5	15.40	15.33	15.43	81.4	90.8	12.6
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: LD0602SD Date(s) Analyzed: 06/08/01 06/08/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1254	1	12.64	12.58	12.68	113		
	2	13.33	13.26	13.36	121		
	3	13.80	13.73	13.83	114		
	4	14.32	14.26	14.36	126		
	5	15.00	14.94	15.04	125	120	
COLUMN 1	1	12.30	12.24	12.34	138		
	2	13.03	12.96	13.06	114		
	3	13.93	13.87	13.97	101		
	4	14.93	14.87	14.97	107		
	5	15.39	15.33	15.43	103	113	6.0
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS3

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: LC0602SE Date(s) Analyzed: 06/10/01 06/10/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1254	1	9.75	9.69	9.79	101		
	2	11.61	11.56	11.66	93.3		
	3	12.37	12.35	12.45	104		
	4	12.74	12.70	12.80	83.4		
	5	13.11	13.07	13.17	85.8	93.5	
COLUMN 1	1	10.47	10.41	10.51	91.3		
	2	11.41	11.36	11.46	75.9		
	3	12.00	11.95	12.05	95.6		
	4	12.19	12.15	12.25	95.6		
	5	12.62	12.58	12.68	91.8	90.0	3.8
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

ELCS4

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: LD0602SE Date(s) Analyzed: 06/10/01 06/10/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1254	1	9.75	9.69	9.79	115		
	2	11.60	11.56	11.66	114		
	3	12.36	12.35	12.45	126		
	4	12.74	12.70	12.80	104		
	5	13.11	13.07	13.17	98.2	111	
COLUMN 1	1	10.46	10.41	10.51	111		
	2	11.41	11.36	11.46	90.5		
	3	12.00	11.95	12.05	113		
	4	12.19	12.15	12.25	113		
	5	12.62	12.58	12.68	108	107	3.7
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30G6

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.07 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
COLUMN 1	3	10.58	10.59	10.69	3420		
	4	11.64	11.59	11.69	4840		
	5	12.81	12.75	12.85	5850	4700	
	1						
	2						
COLUMN 2	3	12.39	12.35	12.45	5220		
	4	12.62	12.57	12.67	5410		
	5	13.14	13.08	13.18	6140	5590	17.3
Aroclor-1254	1	12.63	12.58	12.68	1960		
	2	13.32	13.26	13.36	3240		
COLUMN 1	3	13.79	13.73	13.83	2040		
	4	14.31	14.26	14.36	2170		
	5	14.99	14.94	15.04	1760	2230	
	1						
	2						
COLUMN 2	3	13.92	13.87	13.97	2290		
	4	14.92	14.87	14.97	2270		
	5	15.38	15.33	15.43	1750	2100	6.0
Aroclor-1260	1	14.31	14.26	14.36	1220		
	2	14.81	14.75	14.85	1380		
COLUMN 1	3	15.25	15.20	15.30	1780		
	4	15.72	15.67	15.77	748		
	5	16.16	16.11	16.21	605	1150	
	1						
	2	14.72	14.67	14.77	2380		
COLUMN 2	3	14.92	14.87	14.97	1180		
	4	16.08	16.04	16.14	474		
	5	16.32	16.27	16.37	608	1160	0.9

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30G6DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.07DL Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2	9.76	9.65	9.75	2530		
	3	10.57	10.59	10.69	5850		
	4	11.65	11.59	11.69	8220		
	5					5530	
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1	10.39	10.34	10.44	1970		
	2						
	3	12.39	12.35	12.45	7870		
	4						
	5	13.15	13.08	13.18	7300	5710	3.2
Aroclor-1254	1	12.63	12.58	12.68	3400		
	2	13.32	13.26	13.36	5310		
	3	13.79	13.73	13.83	3090		
	4	14.32	14.26	14.36	4120		
	5	15.00	14.94	15.04	2510	3690	
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2	13.02	12.96	13.06	7420		
	3	13.93	13.87	13.97	3810		
	4	14.92	14.87	14.97	3590		
	5	15.39	15.33	15.43	2490	4330	16.0
Aroclor-1260	1	14.32	14.26	14.36	2310		
	2	14.81	14.75	14.85	2370		
	3	15.25	15.20	15.30	2660		
	4	15.72	15.67	15.77	1200		
	5	16.16	16.11	16.21	796	1870	
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2	14.72	14.67	14.77	3580		
	3	14.92	14.87	14.97	1880		
	4	16.09	16.04	16.14	752		
	5	16.32	16.27	16.37	768	1740	7.2

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30G6MS

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.08MS Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
	3	10.58	10.59	10.69	4220		
COLUMN 1	4	11.64	11.59	11.69	6080		
	5	12.81	12.75	12.85	7330	5880	
	1						
	2						
	3	12.39	12.35	12.45	6610		
COLUMN 2	4	12.62	12.57	12.67	6960		
	5	13.14	13.08	13.18	7870	7150	19.5
	1	12.63	12.58	12.68	2590		
Aroclor-1254	2	13.31	13.26	13.36	4250		
	3	13.79	13.73	13.83	2840		
COLUMN 1	4	14.31	14.26	14.36	2890		
	5	14.99	14.94	15.04	2720	3060	
	1						
	2						
	3	13.92	13.87	13.97	3150		
COLUMN 2	4	14.92	14.87	14.97	3040		
	5	15.38	15.33	15.43	2470	2890	5.7
	1	14.31	14.26	14.36	1620		
Aroclor-1260	2	14.81	14.75	14.85	1870		
	3	15.25	15.20	15.30	2490		
COLUMN 1	4	15.72	15.67	15.77	1010		
	5	16.16	16.11	16.21	929	1580	
	1						
	2	14.72	14.67	14.77	3280		
	3	14.92	14.87	14.97	1590		
COLUMN 2	4	16.08	16.04	16.14	626		
	5	16.32	16.27	16.37	814	1580	0.0

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30G6MSD

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.09MSD Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
COLUMN 1	3	10.58	10.59	10.69	2570		
	4	11.64	11.59	11.69	3680		
	5	12.81	12.75	12.85	4610	3620	
	1						
	2						
COLUMN 2	3	12.39	12.35	12.45	3960		
	4	12.62	12.57	12.67	4170		
	5	13.14	13.08	13.18	4810	4310	17.4
Aroclor-1254	1	12.63	12.58	12.68	1660		
	2	13.32	13.26	13.36	2610		
COLUMN 1	3	13.79	13.73	13.83	1750		
	4	14.31	14.26	14.36	1940		
	5	14.99	14.94	15.04	1590	1910	
	1						
	2						
COLUMN 2	3	13.92	13.87	13.97	1900		
	4	14.92	14.87	14.97	2100		
	5	15.38	15.33	15.43	1570	1860	2.7
Aroclor-1260	1	14.31	14.26	14.36	1090		
	2	14.81	14.75	14.85	1260		
COLUMN 1	3	15.25	15.20	15.30	1640		
	4	15.72	15.67	15.77	721		
	5	16.16	16.11	16.21	752	1090	
	1						
	2						
COLUMN 2	3	14.72	14.67	14.77	2140		
	4	16.08	16.04	16.14	486		
	5	16.32	16.27	16.37	600	1080	0.9

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30G7

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.10 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
	3	10.58	10.59	10.69	4590		
	4	11.64	11.59	11.69	6950		
	5	12.80	12.75	12.85	6750	6100	
	1						
	2						
	3	12.39	12.35	12.45	7730		
	4	12.62	12.57	12.67	8050		
	5	13.13	13.08	13.18	8050	7940	26.2
Aroclor-1254	1	12.63	12.58	12.68	2300		
	2	13.31	13.26	13.36	3570		
	3	13.79	13.73	13.83	2360		
	4	14.31	14.26	14.36	2300		
	5	14.99	14.94	15.04	1930	2490	
	1						
	2						
	3	13.92	13.87	13.97	3760		
	4	14.92	14.87	14.97	2600		
	5	15.38	15.33	15.43	2030	2800	11.7
Aroclor-1260	1	14.31	14.26	14.36	1290		
	2	14.81	14.75	14.85	1550		
	3	15.25	15.20	15.30	1990		
	4	15.72	15.67	15.77	842		
	5	16.16	16.11	16.21	749	1280	
	1						
	2	14.72	14.67	14.77	2760		
	3	14.92	14.87	14.97	1360		
	4	16.08	16.04	16.14	547		
	5	16.32	16.27	16.37	708	1340	4.6

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30G7DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.10DL Date(s) Analyzed: 06/15/01 06/15/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
COLUMN 1	3	10.68	10.59	10.69	1330		
	4	11.64	11.59	11.69	15600		
	5	12.80	12.76	12.86	12900	9940	
	1	10.40	10.35	10.45	6500		
	2						
COLUMN 2	3						
	4	12.63	12.59	12.69	16200		
	5	13.14	13.10	13.20	17200	13300	28.9
Aroclor-1254	1	12.62	12.58	12.68	5640		
	2	13.31	13.27	13.37	6990		
COLUMN 1	3	13.78	13.74	13.84	4610		
	4	14.31	14.26	14.36	4470		
	5	14.99	14.95	15.05	3640	5070	
	1						
	2						
COLUMN 2	3	13.93	13.89	13.99	7120		
	4	14.92	14.88	14.98	5620		
	5	15.39	15.35	15.45	4320	5690	11.5
Aroclor-1260	1	14.31	14.26	14.36	2540		
	2	14.80	14.76	14.86	2970		
COLUMN 1	3	15.25	15.21	15.31	3360		
	4	15.72	15.67	15.77	1100		
	5	16.16	16.11	16.21	1110	2220	
	1						
	2	14.73	14.68	14.78	4880		
COLUMN 2	3	14.92	14.88	14.98	2450		
	4	16.09	16.05	16.15	958		
	5	16.32	16.28	16.38	1140	2360	6.1

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30G8

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.11 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2	9.70	9.65	9.75	39.9		
	3	10.62	10.59	10.69	219		
	4						
	5	12.80	12.75	12.85	401	220	
Aroclor-1254	1	10.39	10.34	10.44	364		
	2	11.17	11.12	11.22	89.1		
	3						
	4	12.62	12.57	12.67	584		
	5					346	57.3
Aroclor-1260	1	12.63	12.58	12.68	346		
	2	13.31	13.26	13.36	426		
	3	13.79	13.73	13.83	305		
	4	14.31	14.26	14.36	313		
	5	14.99	14.94	15.04	173	313	
COLUMN 1	1						
	2						
	3	13.92	13.87	13.97	470		
	4	14.92	14.87	14.97	320		
	5	15.38	15.33	15.43	197	329	5.0
COLUMN 2	1	14.31	14.26	14.36	176		
	2	14.81	14.75	14.85	238		
	3	15.25	15.20	15.30	239		
	4	15.71	15.67	15.77	119		
	5					193	
COLUMN 1	1						
	2						
	3	14.92	14.87	14.97	167		
	4	16.08	16.04	16.14	85.0		
	5	16.32	16.27	16.37	102	118	48.2

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30G9

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.12 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
	3	10.63	10.59	10.69	77.0		
COLUMN 1	4	11.64	11.59	11.69	101		
	5	12.80	12.75	12.85	92.9	90.3	
	1	10.40	10.34	10.44	238		
	2						
	3	12.39	12.35	12.45	66.9		
COLUMN 2	4						
	5	13.13	13.08	13.18	77.2	127	33.8
Aroclor-1254	1	12.63	12.58	12.68	61.1		
	2	13.31	13.26	13.36	53.4		
COLUMN 1	3	13.79	13.73	13.83	130		
	4	14.32	14.26	14.36	137		
	5	14.99	14.94	15.04	43.2	84.9	
	1	12.29	12.24	12.34	113		
	2	13.01	12.96	13.06	31.7		
COLUMN 2	3	13.93	13.87	13.97	49.3		
	4	14.92	14.87	14.97	89.1		
	5	15.38	15.33	15.43	59.1	68.4	21.5
Aroclor-1260	1	14.32	14.26	14.36	76.9		
	2	14.81	14.75	14.85	101		
COLUMN 1	3	15.25	15.20	15.30	72.8		
	4	15.71	15.67	15.77	153		
	5	16.16	16.11	16.21	238	128	
	1						
	2						
COLUMN 2	3	14.92	14.87	14.97	46.6		
	4	16.08	16.04	16.14	69.9		
	5	16.32	16.27	16.37	79.0	65.2	65.0

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30HO

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.13 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1254	1	12.64	12.58	12.68	85.4		
	2	13.31	13.26	13.36	27.0		
	3						
COLUMN 1	4	14.32	14.26	14.36	160		
	5	14.99	14.94	15.04	51.5	81.0	
	1						
	2						
	3						
COLUMN 2	4	14.92	14.87	14.97	101		
	5	15.38	15.33	15.43	60.4	83.8	3.4
	1						
	2						
	3						
Aroclor-1260	1	14.32	14.26	14.36	89.8		
	2	14.81	14.75	14.85	126		
	3	15.25	15.20	15.30	79.1		
	4	15.71	15.67	15.77	184		
	5					120	
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3	14.92	14.87	14.97	52.8		
	4	16.08	16.04	16.14	69.9		
	5	16.32	16.27	16.37	100	74.2	47.2
	1						
	2						
	3						
	4						
	5						
	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30H1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.14 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
	3	10.58	10.59	10.69	1550		
COLUMN 1	4	11.64	11.59	11.69	2180		
	5	12.80	12.75	12.85	2630	2120	
	1						
	2						
	3	12.39	12.35	12.45	2330		
COLUMN 2	4	12.62	12.57	12.67	2250		
	5	13.13	13.08	13.18	2760	2450	14.4
	1	12.63	12.58	12.68	1080		
Aroclor-1254	2	13.31	13.26	13.36	1750		
	3	13.79	13.73	13.83	1110		
COLUMN 1	4	14.31	14.26	14.36	1300		
	5	14.99	14.94	15.04	997	1250	
	1						
	2	13.01	12.96	13.06	2210		
	3	13.92	13.87	13.97	1030		
COLUMN 2	4	14.92	14.87	14.97	1500		
	5	15.38	15.33	15.43	1050	1450	14.8
	1	14.31	14.26	14.36	731		
Aroclor-1260	2	14.80	14.75	14.85	857		
	3	15.25	15.20	15.30	1110		
COLUMN 1	4	15.72	15.67	15.77	505		
	5	16.16	16.11	16.21	559	752	
	1						
	2	14.72	14.67	14.77	1380		
	3	14.92	14.87	14.97	783		
COLUMN 2	4	16.08	16.04	16.14	364		
	5	16.32	16.27	16.37	430	739	1.7

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30H1DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.14DL Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1	9.77	9.65	9.75	1510		
	2	10.58	10.59	10.69	3200		
	3	11.65	11.59	11.69	3370		
	4					2690	
	5						
COLUMN 1	1	10.39	10.34	10.44	1010		
	2	12.40	12.35	12.45	3120		
	3	12.63	12.57	12.67	3190		
	4	13.14	13.08	13.18	3260	2640	1.9
	5						
Aroclor-1254	1	12.63	12.58	12.68	1720		
	2	13.32	13.26	13.36	2530		
	3	13.79	13.73	13.83	1530		
	4	14.32	14.26	14.36	2030		
	5	15.00	14.94	15.04	1300	1820	
COLUMN 2	1						
	2	13.02	12.96	13.06	2890		
	3	13.93	13.87	13.97	1600		
	4	14.92	14.87	14.97	1850		
	5	15.39	15.33	15.43	1320	1920	5.3
Aroclor-1260	1	14.32	14.26	14.36	1140		
	2	14.81	14.75	14.85	1230		
	3	15.25	15.20	15.30	1450		
	4	15.72	15.67	15.77	683		
	5	16.16	16.11	16.21	566	1010	
COLUMN 1	1						
	2	14.72	14.67	14.77	1820		
	3	14.92	14.87	14.97	965		
	4	16.09	16.04	16.14	449		
	5	16.32	16.27	16.37	476	928	8.5
COLUMN 2	1						

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30H2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.15 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
	3	10.58	10.59	10.69	21200		
COLUMN 1	4	11.65	11.59	11.69	23400		
	5	12.82	12.75	12.85	23700	22800	
	1						
	2						
	3	12.40	12.35	12.45	21800		
COLUMN 2	4	12.63	12.57	12.67	28300		
	5	13.15	13.08	13.18	23200	24400	6.8
Aroclor-1254	1	12.64	12.58	12.68	6480		
	2						
	3	13.79	13.73	13.83	5370		
COLUMN 1	4	14.32	14.26	14.36	5640		
	5	15.00	14.94	15.04	4780	5570	
	1						
	2						
	3	13.93	13.87	13.97	7860		
COLUMN 2	4	14.92	14.87	14.97	5120		
	5	15.39	15.33	15.43	4410	5800	4.0
Aroclor-1260	1	14.32	14.26	14.36	3170		
	2	14.81	14.75	14.85	3320		
	3	15.25	15.20	15.30	3880		
COLUMN 1	4	15.72	15.67	15.77	1740		
	5	16.16	16.11	16.21	1370	2700	
	1						
	2						
	3	14.92	14.87	14.97	2680		
COLUMN 2	4	16.09	16.04	16.14	1130		
	5	16.32	16.27	16.37	1250	1690	46.0

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H2DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.15DL Date(s) Analyzed: 06/13/01 06/13/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2	10.69	10.60	10.70	7720		
COLUMN 1	3	11.67	11.60	11.70	38300		
	4						
	5	12.86	12.76	12.86	31800	25900	
COLUMN 2	1	10.40	10.35	10.45	21800		
	2	12.40	12.35	12.45	54500		
	3						
	4	13.19	13.13	13.23	43600	40000	42.8
	5						
Aroclor-1254	1	12.66	12.61	12.71	9030		
	2	13.35	13.31	13.41	14500		
COLUMN 1	3	13.82	13.77	13.87	9230		
	4	14.34	14.29	14.39	9050		
	5	15.02	14.97	15.07	8070	9980	
COLUMN 2	1						
	2						
	3	13.95	13.91	14.01	18100		
	4	14.94	14.90	15.00	9890		
	5	15.40	15.36	15.46	10500	12800	24.8
Aroclor-1260	1	14.34	14.29	14.39	4630		
	2	14.84	14.78	14.88	5180		
COLUMN 1	3	15.27	15.23	15.33	4990		
	4	15.73	15.69	15.79	1810		
	5	16.18	16.13	16.23	1400	3600	
COLUMN 2	1						
	2	14.74	14.69	14.79	6520		
	3	14.94	14.89	14.99	4730		
	4	16.10	16.05	16.15	1810		
	5	16.33	16.29	16.39	2160	3800	5.4

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30H3

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.16 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
	3	10.58	10.59	10.69	742		
	4	11.64	11.59	11.69	873		
	5	12.80	12.75	12.85	649	755	
	1	10.39	10.34	10.44	735		
	2	11.17	11.12	11.22	1120		
	3	12.39	12.35	12.45	746		
COLUMN 2	4	12.62	12.57	12.67	921		
	5	13.13	13.08	13.18	1040	912	18.8
	1	12.64	12.58	12.68	194		
	2						
	3	13.78	13.73	13.83	248		
	4	14.31	14.26	14.36	281		
	5	14.99	14.94	15.04	218	235	
Aroclor-1254	1	13.92	12.24	12.34	308		
	2						
	3	13.92	13.87	13.97	652		
	4	14.92	14.87	14.97	213		
	5	15.38	15.33	15.43	221	348	38.8
	1	14.31	14.26	14.36	158		
	2	14.81	14.75	14.85	195		
	3	15.25	15.20	15.30	215		
COLUMN 1	4	15.72	15.67	15.77	123		
	5					173	
	1	14.91	14.38	14.48	214		
	2						
	3	14.92	14.87	14.97	111		
	4	16.08	16.04	16.14	93.2		
	5	16.32	16.27	16.37	108	132	26.9

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30H3DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.16DL Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
COLUMN 1	3	10.58	10.59	10.69	1160		
	4	11.65	11.59	11.69	1200		
	5	12.81	12.75	12.85	1440	1270	
	1						
	2						
COLUMN 2	3	12.40	12.35	12.45	996		
	4	12.63	12.57	12.67	1190		
	5	13.14	13.08	13.18	975	1050	19.0
Aroclor-1254	1						
	2	13.32	13.26	13.36	293		
COLUMN 1	3	13.79	13.73	13.83	292		
	4	14.32	14.26	14.36	335		
	5	14.99	14.94	15.04	255	294	
	1						
	2						
COLUMN 2	3	13.93	13.87	13.97	344		
	4	14.92	14.87	14.97	260		
	5	15.38	15.33	15.43	241	282	4.2
Aroclor-1260	1	14.32	14.26	14.36	188		
	2	14.81	14.75	14.85	227		
COLUMN 1	3	15.25	15.20	15.30	244		
	4	15.72	15.67	15.77	128		
	5	16.16	16.11	16.21	138	185	
	1						
	2	14.72	14.67	14.77	732		
COLUMN 2	3	14.92	14.87	14.97	136		
	4	16.09	16.04	16.14	87.9		
	5	16.32	16.27	16.37	112	267	36.3

At least 3 peaks are required for identification of multicomponent analytes

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IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30H4

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.17 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1						
	2	9.76	9.65	9.75	1090		
	3	10.58	10.59	10.69	2260		
COLUMN 1	4	11.64	11.59	11.69	3720		
	5					2360	
	1	10.39	10.34	10.44	1370		
	2						
COLUMN 2	3	12.39	12.35	12.45	3750		
	4	12.62	12.57	12.67	4840		
	5					3320	40.7
Aroclor-1254	1						
	2	13.31	13.26	13.36	3090		
	3	13.78	13.73	13.83	2530		
COLUMN 1	4	14.31	14.26	14.36	3180		
	5	14.99	14.94	15.04	3660	3120	
	1						
	2						
COLUMN 2	3	13.92	13.87	13.97	2090		
	4	14.92	14.87	14.97	3080		
	5	15.38	15.33	15.43	3500	2890	7.7
Aroclor-1260	1	14.31	14.26	14.36	1790		
	2	14.80	14.75	14.85	2140		
	3						
COLUMN 1	4	15.72	15.67	15.77	1200		
	5	16.16	16.11	16.21	1070	1550	
	1						
	2						
COLUMN 2	3	14.92	14.87	14.97	1610		
	4	16.08	16.04	16.14	711		
	5	16.31	16.27	16.37	1190	1170	27.9

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H4DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.17DL Date(s) Analyzed: 06/13/01 06/13/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1	9.77	9.65	9.75	903		
	2						
	3						
	4	11.66	11.60	11.70	10400	7370	
	5	12.84	12.76	12.86	10800		
COLUMN 1	1	10.39	10.35	10.45	2800		
	2						
	3	12.39	12.35	12.45	13800		
	4						
	5	13.18	13.13	13.23	17200	11300	42.1
COLUMN 2	1	12.66	12.61	12.71	6240		
	2	13.34	13.31	13.41	6760		
	3	13.82	13.77	13.87	6610		
	4	14.33	14.29	14.39	8280		
	5	15.01	14.97	15.07	4600	6500	
Aroclor-1254	1	12.31	12.27	12.37	17100		
	2	13.05	13.02	13.12	20000		
	3	13.94	13.91	14.01	8120		
	4	14.94	14.90	15.00	8460		
	5	15.40	15.36	15.46	10400	12800	65.3
COLUMN 1	1	14.33	14.29	14.39	4240		
	2	14.83	14.78	14.88	5730		
	3	15.27	15.23	15.33	5850		
	4						
	5	16.17	16.13	16.23	12500	7080	
COLUMN 2	1						
	2	14.74	14.69	14.79	5590		
	3	14.94	14.89	14.99	4050		
	4	16.09	16.05	16.15	4250		
	5	16.33	16.29	16.39	2320	4050	54.4

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

Lab Name: SWL-TULSA

E30H5DL

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.18DL Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1	9.77	9.65	9.75	22500		
COLUMN 1	2	10.58	10.59	10.69	72700		
	3	11.65	11.59	11.69	51800		
	4					49000	
	5						
COLUMN 2	1	10.39	10.34	10.44	22700		
	2						
	3	12.39	12.35	12.45	55800		
	4						
	5	13.17	13.08	13.18	73300	50600	3.2
Aroclor-1254	1	12.65	12.58	12.68	14600		
COLUMN 1	2	13.33	13.26	13.36	24100		
	3	13.80	13.73	13.83	15700		
	4	14.32	14.26	14.36	21300		
	5	15.01	14.94	15.04	15800	18300	
COLUMN 2	1						
	2						
	3	13.94	13.87	13.97	22900		
	4	14.93	14.87	14.97	23500		
	5	15.39	15.33	15.43	17200	21200	14.7
Aroclor-1260	1	14.32	14.26	14.36	12000		
COLUMN 1	2	14.82	14.75	14.85	11600		
	3	15.26	15.20	15.30	12600		
	4	15.72	15.67	15.77	8230		
	5	16.16	16.11	16.21	13700	11600	
COLUMN 2	1						
	2	14.73	14.67	14.77	21100		
	3	14.93	14.87	14.97	12300		
	4	16.09	16.04	16.14	7260		
	5	16.32	16.27	16.37	8440	12300	5.9

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30H5

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.18 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
COLUMN 1	3	10.58	10.59	10.69	19200		
	4	11.64	11.59	11.69	18600		
	5	12.80	12.75	12.85	28100	22000	
	1						
	2						
COLUMN 2	3	12.39	12.35	12.45	21000		
	4	12.62	12.57	12.67	31000		
	5	13.13	13.08	13.18	34000	28700	26.4
Aroclor-1254	1	12.64	12.58	12.68	7100		
	2	13.31	13.26	13.36	8170		
COLUMN 1	3	13.78	13.73	13.83	6480		
	4	14.31	14.26	14.36	6850		
	5					7150	
	1						
	2						
COLUMN 2	3	13.92	13.87	13.97	5390		
	4	14.92	14.87	14.97	7440		
	5	15.38	15.33	15.43	8240	7020	1.8
Aroclor-1260	1	14.31	14.26	14.36	3850		
	2	14.80	14.75	14.85	4320		
COLUMN 1	3	15.25	15.20	15.30	6040		
	4	15.72	15.67	15.77	3540		
	5	16.16	16.11	16.21	3340	4220	
	1						
	2						
COLUMN 2	3	14.92	14.87	14.97	3890		
	4	16.08	16.04	16.14	2490		
	5	16.31	16.27	16.37	3410	3260	25.7

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30H6

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.19 Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
COLUMN 1	3	10.58	10.59	10.69	5490		
	4	11.64	11.59	11.69	6470		
	5	12.81	12.75	12.85	9550	7170	
	1						
	2						
COLUMN 2	3	12.39	12.35	12.45	6820		
	4	12.62	12.57	12.67	10200		
	5	13.14	13.08	13.18	10400	9140	24.2
Aroclor-1254	1	12.63	12.58	12.68	3740		
	2	13.31	13.26	13.36	5180		
COLUMN 1	3	13.78	13.73	13.83	4180		
	4	14.31	14.26	14.36	4720		
	5	14.99	14.94	15.04	5630	4690	
	1						
	2						
COLUMN 2	3	13.92	13.87	13.97	3160		
	4	14.92	14.87	14.97	5770		
	5	15.38	15.33	15.43	5000	4640	1.1
Aroclor-1260	1	14.31	14.26	14.36	2650		
	2	14.81	14.75	14.85	3070		
COLUMN 1	3						
	4	15.72	15.67	15.77	1850		
	5	16.16	16.11	16.21	1980	2390	
	1						
	2						
COLUMN 2	3	14.92	14.87	14.97	3020		
	4	16.08	16.04	16.14	1140		
	5	16.31	16.27	16.37	1630	1930	21.3

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30H6DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.19DL Date(s) Analyzed: 06/09/01 06/09/01

Instrument ID (1): HP_15A

Instrument ID (2): HP_15B

GC Column (1): DB-17MS ID: 0.32(mm) GC Column (2): DB-XLB ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
	3	10.58	10.59	10.69	11800		
COLUMN 1	4	11.65	11.59	11.69	12400		
	5	12.83	12.75	12.85	18200	14100	
	1						
	2						
	3	12.40	12.35	12.45	10900		
COLUMN 2	4	12.64	12.57	12.67	15600		
	5	13.16	13.08	13.18	13500	13300	5.8
Aroclor-1254	1	12.64	12.58	12.68	7040		
	2	13.33	13.26	13.36	10300		
	3	13.80	13.73	13.83	7360		
COLUMN 1	4	14.32	14.26	14.36	9690		
	5	15.00	14.94	15.04	7830	8440	
	1						
	2						
	3	13.93	13.87	13.97	5800		
COLUMN 2	4	14.93	14.87	14.97	10200		
	5	15.39	15.33	15.43	7900	7970	5.7
Aroclor-1260	1	14.32	14.26	14.36	5440		
	2	14.82	14.75	14.85	5730		
	3	15.26	15.20	15.30	7380		
COLUMN 1	4	15.72	15.67	15.77	3030		
	5	16.16	16.11	16.21	2140	4740	
	1						
	2						
	3	14.93	14.87	14.97	5340		
COLUMN 2	4	16.09	16.04	16.14	2160		
	5	16.32	16.27	16.37	2260	3250	37.3

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30J0

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.23 Date(s) Analyzed: 06/10/01 06/10/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1	8.74	8.70	8.80	658		
	2	9.00	8.99	9.09	2490		
	3	9.56	9.53	9.63	682		
	COLUMN 1	4	10.16	10.14	10.24	1130	
		5	10.68	10.69	10.79	1020	1200
Aroclor-1254	1	7.80	7.75	7.85	314		
	2	9.14	9.10	9.20	1060		
	3	9.69	9.64	9.74	238		
	COLUMN 2	4	10.66	10.63	10.73	1170	
		5				696	72.4
Aroclor-1260	1						
	2						
	3	12.32	12.35	12.45	380		
	COLUMN 1	4	12.73	12.70	12.80	239	
		5	13.09	13.07	13.17	259	293
Aroclor-1260	1						
	2	11.39	11.36	11.46	238		
	3	11.98	11.95	12.05	335		
	COLUMN 2	4	12.17	12.15	12.25	298	
		5	12.60	12.58	12.68	289	290 1.0

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30J0DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.23DL Date(s) Analyzed: 06/12/01 06/12/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1	8.77	8.70	8.80	578		
	2						
	3	9.60	9.53	9.63	722		
	4						
	5	10.72	10.69	10.79	1090	797	
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2	9.16	9.10	9.20	1150		
	3	9.71	9.64	9.74	310		
	4	10.68	10.63	10.73	1340		
	5					933	17.1
Aroclor-1254	1						
	2	11.62	11.56	11.66	558		
	3	12.36	12.35	12.45	505		
	4	12.76	12.70	12.80	242		
	5	13.12	13.07	13.17	201	376	
COLUMN 1	1						
	2	11.41	11.36	11.46	420		
	3	12.00	11.95	12.05	329		
	4	12.19	12.15	12.25	402		
	5	12.62	12.58	12.68	419	392	4.2
Aroclor-1260	1						
	2	12.54	12.49	12.59	173		
	3	13.12	13.10	13.20	149		
	4	13.69	13.62	13.72	118	147	
	5						
COLUMN 2	1						
	2	12.62	12.58	12.68	284		
	3	13.38	13.37	13.47	122		
	4						
	5	14.28	14.24	14.34	53.4	153	4.0

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30J1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.24 Date(s) Analyzed: 06/10/01 06/10/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1	8.74	8.70	8.80	631		
COLUMN 1	2						
	3	9.56	9.53	9.63	687		
	4	10.16	10.14	10.24	1260		
	5	10.68	10.69	10.79	1140	930	
COLUMN 2	1	7.80	7.75	7.85	635		
	2	9.14	9.10	9.20	1420		
	3						
	4	10.66	10.63	10.73	995		
	5	11.02	11.01	11.11	1350	1100	16.7
Aroclor-1254	1						
COLUMN 1	2						
	3	12.32	12.35	12.45	380		
	4	12.73	12.70	12.80	210		
	5	13.09	13.07	13.17	224	271	
COLUMN 2	1						
	2	11.39	11.36	11.46	244		
	3	11.98	11.95	12.05	210		
	4	12.17	12.15	12.25	282		
	5	12.60	12.58	12.68	219	239	12.5
Aroclor-1260	1						
COLUMN 1	2	12.51	12.49	12.59	111		
	3						
	4	13.66	13.62	13.72	111		
	5	14.12	14.10	14.20	63.0	95.0	
COLUMN 2	1						
	2	12.60	12.58	12.68	148		
	3						
	4	14.04	14.00	14.10	36.3		
	5	14.27	14.24	14.34	56.2	80.2	16.9

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30J1DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.24DL Date(s) Analyzed: 06/12/01 06/12/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1	8.76	8.70	8.80	648		
	2						
	3	9.58	9.53	9.63	524		
	4						
	5	10.70	10.69	10.79	1270	814	
COLUMN 1							
	1	7.80	7.75	7.85	565		
	2	9.14	9.10	9.20	1210		
	3	9.70	9.64	9.74	365		
	4						
	5					713	14.2
Aroclor-1254	1						
	2	11.60	11.56	11.66	536		
	3	12.34	12.35	12.45	536		
	4	12.74	12.70	12.80	224		
	5	13.10	13.07	13.17	208	376	
COLUMN 2							
	1						
	2	11.40	11.36	11.46	394		
	3	11.99	11.95	12.05	263		
	4	12.18	12.15	12.25	381		
	5	12.61	12.58	12.68	323	340	10.1
Aroclor-1260	1	12.16	12.11	12.21	141		
	2	12.52	12.49	12.59	179		
	3	13.10	13.10	13.20	155		
	4	13.67	13.62	13.72	123		
	5	14.13	14.10	14.20	48.6	129	
COLUMN 1							
	1						
	2	12.61	12.58	12.68	219		
	3	13.36	13.37	13.47	138		
	4	14.04	14.00	14.10	44.3		
	5	14.27	14.24	14.34	66.8	117	9.8
COLUMN 2							

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30J2

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.25 Date(s) Analyzed: 06/10/01 06/10/01

Instrument ID (1): HP_03A

Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1	8.74	8.70	8.80	2510		
	2						
	3	9.56	9.53	9.63	3010		
	4	10.16	10.14	10.24	4180		
	5					3230	
COLUMN 1	1	7.79	7.75	7.85	1890		
	2						
	3	9.69	9.64	9.74	1090		
	4						
	5	11.01	11.01	11.11	3650	2210	37.5
COLUMN 2	1						
	2	11.58	11.56	11.66	1450		
	3	12.31	12.35	12.45	1560		
	4	12.73	12.70	12.80	1270		
	5	13.08	13.07	13.17	1340	1400	
Aroclor-1254	1						
	2	11.38	11.36	11.46	886		
	3	11.98	11.95	12.05	973		
	4	12.17	12.15	12.25	1220		
	5	12.60	12.58	12.68	1070	1040	29.5
COLUMN 1	1	12.14	12.11	12.21	709		
	2	12.50	12.49	12.59	585		
	3						
	4	13.66	13.62	13.72	779		
	5	14.12	14.10	14.20	378	613	
COLUMN 2	1						
	2	12.60	12.58	12.68	725		
	3						
	4	14.03	14.00	14.10	209		
	5	14.26	14.24	14.34	350	428	35.5

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30J2DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.25DL Date(s) Analyzed: 06/12/01 06/12/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1	8.76	8.70	8.80	3970		
	2						
	3	9.58	9.53	9.63	5010		
	4						
	5	10.71	10.69	10.79	5230	4740	
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1	7.80	7.75	7.85	1720		
	2						
	3	9.70	9.64	9.74	2710		
	4						
	5	11.03	11.01	11.11	6400	3610	27.1
Aroclor-1254	1						
	2	11.59	11.56	11.66	2680		
	3	12.34	12.35	12.45	3000		
	4	12.74	12.70	12.80	1830		
	5	13.10	13.07	13.17	1660	2290	
COLUMN 1	1						
	2	11.40	11.36	11.46	2070		
	3	11.99	11.95	12.05	1590		
	4	12.18	12.15	12.25	2320		
	5	12.61	12.58	12.68	2080	2020	12.5
COLUMN 2	1						
	2						
	3						
	4						
	5						
Aroclor-1260	1	12.15	12.11	12.21	1250		
	2	12.52	12.49	12.59	1350		
	3						
	4	13.67	13.62	13.72	998		
	5	14.13	14.10	14.20	380	994	
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30J3

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.26 Date(s) Analyzed: 06/10/01 06/10/01

Instrument ID (1): HP_03A

Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW	FROM	TO	CONCENTRATION	MEAN CONCENTRATION	%D
Aroclor-1242	1	8.74		8.70	8.80	3040		
	2							
	3	9.55		9.53	9.63	3640		
	4	10.16		10.14	10.24	4810		
	5						3830	
COLUMN 1	1	7.79		7.75	7.85	2360		
	2							
	3	9.69		9.64	9.74	1290		
	4							
	5	11.01		11.01	11.11	4210	2620	37.5
Aroclor-1254	1							
	2	11.58		11.56	11.66	1050		
	3	12.31		12.35	12.45	1040		
	4	12.73		12.70	12.80	723		
	5	13.08		13.07	13.17	833	912	
COLUMN 2	1							
	2	11.38		11.36	11.46	643		
	3	11.98		11.95	12.05	496		
	4	12.17		12.15	12.25	855		
	5	12.60		12.58	12.68	654	662	31.8
Aroclor-1260	1	12.14		12.11	12.21	489		
	2	12.50		12.49	12.59	325		
	3							
	4	13.66		13.62	13.72	422		
	5	14.12		14.10	14.20	303	385	
COLUMN 1	1							
	2	12.60		12.58	12.68	443		
	3							
	4	14.03		14.00	14.10	172		
	5	14.26		14.24	14.34	255	290	28.1

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30J3DL

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.26DL Date(s) Analyzed: 06/12/01 06/12/01

Instrument ID (1): HP_03A

Instrument ID (2): HP_03B

GC Column (1): DB-17 ID: 0.32(mm) GC Column (2): DB-1701 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1	8.75	8.70	8.80	5180		
	2						
	3	9.58	9.53	9.63	4410		
	4						
	5	10.70	10.69	10.79	6100	5230	
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1	7.80	7.75	7.85	2560		
	2						
	3	9.69	9.64	9.74	2290		
	4						
	5	11.03	11.01	11.11	6150	3670	35.1
Aroclor-1254	1						
	2	11.59	11.56	11.66	2130		
	3	12.34	12.35	12.45	2220		
	4	12.73	12.70	12.80	1060		
	5	13.09	13.07	13.17	996	1600	
COLUMN 1	1						
	2	11.40	11.36	11.46	1170		
	3	11.99	11.95	12.05	758		
	4	12.18	12.15	12.25	1670		
	5	12.61	12.58	12.68	1300	1220	27.0
COLUMN 2	1						
	2						
	3						
	4						
	5						
Aroclor-1260	1	12.15	12.11	12.21	585		
	2	12.52	12.49	12.59	815		
	3						
	4	13.66	13.62	13.72	460		
	5	14.12	14.10	14.20	456	579	
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2	12.61	12.58	12.68	881		
	3						
	4	14.04	14.00	14.10	390		
	5	14.27	14.24	14.34	412	561	3.2

At least 3 peaks are required for identification of multicomponent analytes

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10B
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

E30J4

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: 29294 SDG No.: E30G5

Lab Sample ID: 46676.27 Date(s) Analyzed: 06/10/01 06/10/01

Instrument ID (1): HP_03A Instrument ID (2): HP_03B

GC Column (1): PEST ID: 0.32(mm) GC Column (2): PEST II ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
Aroclor-1242	1						
	2						
	3	9.56	9.53	9.63	42.0		
	4	10.17	10.14	10.24	114		
	5	10.70	10.69	10.79	47.3	67.8	
	1						
	2	9.14	9.10	9.20	98.6		
	3	9.69	9.64	9.74	30.6		
	4	10.67	10.63	10.73	46.6		
	5	11.03	11.01	11.11	90.6	66.6	1.8
Aroclor-1254	1	9.75	9.69	9.79	166		
	2	11.60	11.56	11.66	109		
	3	12.32	12.35	12.45	50.0		
	4	12.73	12.70	12.80	34.7		
	5					89.9	
	1	10.45	10.41	10.51	194		
	2	11.39	11.36	11.46	23.7		
	3	11.99	11.95	12.05	27.8		
	4	12.17	12.15	12.25	41.4		
	5	12.60	12.58	12.68	26.2	62.6	35.8
Aroclor-1260	1	12.15	12.11	12.21	20.5		
	2	12.51	12.49	12.59	19.8		
	3	14.14	13.10	13.20	119		
	4						
	5	14.14	14.10	14.20	181	85.1	
	1	12.46	12.44	12.54	20.5		
	2	12.60	12.58	12.68	23.3		
	3						
	4	14.04	14.00	14.10	46.8		
	5	14.26	14.24	14.34	27.0	29.4	97.3

At least 3 peaks are required for identification of multicomponent analytes

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